

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

THE CHANGING COMPOSITION OF
FAMILY BUDGETS FOR SELECTED GROUPS
OF CORN BELT FARMERS

1940-42

by

Willard W. Cochrane
Agricultural Economist

and

Mary D. Grigg
Agricultural Statistician

Washington, D. C.
October 1946

CONTENTS

	Page
Introduction	
Objectives.....	1
Data.....	1
Procedure.....	3
Definitions.....	4
Trends and tendencies.....	9
Static analysis.....	9
Family expenditures.....	9
Capital expenditures.....	12
Debt repayment.....	16
Liquid asset position.....	17
Dynamic analysis.....	20
Average income relationships.....	20
Marginal income relationships.....	28
Time and income variations.....	36
Household-size considerations.....	40
Family living and the farm enterprise.....	44
Tables.....	48
Appendix.....	100
Measures of central tendency.....	100
Outlays related to cash income.....	103

605671
THE CHANGING COMPOSITION OF FAMILY BUDGETS FOR SELECTED
GROUPS OF CORN BELT FARMERS 1940-42 1/

by
Willard W. Cochran, Agricultural Economist
and Mary D. Grigg, Agricultural Statistician

INTRODUCTION

Objectives.-- The immediate objectives of this study are to describe the composition of farm family budgets, classified by income size and household size, and to measure the change in the composition of farm family budgets associated with changes in income and in household size. In other words, to determine to what extent the decision-making units--farm families in this case--allocate their income differently when their incomes change and/or their actual size is modified. Can we give answers, for Corn Belt farmers at least, to such problems as: Do families who experience an increase in income allocate that income between different lines of expenditure in the same way as the families into whose income class they have just moved? Or is the difference in household size a more significant factor in the allocation of income than the level of income itself?

These objectives may appear rather modest, and they are, except for the fact that almost no continuous income-expenditure data have been available in the past to make possible empirical studies of this nature. But the potentialities for gaining an understanding of the operating economy from a study such as this, and larger and more significant ones which it is hoped will follow, are tremendous. Consumer behavior with respect to the allocation of income--between spending and saving--is a powerful force contributing to the expansion or contraction of the total economy. And changes in the composition of family budgets associated with changes in income and household size have policy implications with respect to taxation or the inverse, consumer payments--usually referred to somewhat callously as consumer subsidies.

The present study is handicapped by lack of detail and by sample limitations; at best it can provide only a broad outline of expenditure relative to income for a limited group of farm families. But income-expenditure studies of this type can provide some valuable information for the production side of the economy--clues as to which areas of production may expect to expand or to contract with cyclical fluctuation in the economy and, most important, with secular trends in the economy.

Data.-- The budgetary data upon which this study is based were collected from two principal sources: (1) the Farm Security Administration, and (2) the State Colleges of Agriculture. All the data from both sources were collected in the four States, Minnesota, Wisconsin, Iowa, and Illinois. Records of 1,009 farm families were collected where those records were continuous over the 3-year period 1940-42, and where both farm and home records were available in each individual case. Of these 1,009 cases, 642 were collected from the Farm Security Administration and 367 from the State Colleges.

1/ The authors wish to acknowledge the contribution that numerous staff members of the Regional Offices of the Farm Security Administration and the State Colleges of Agriculture made in the collection of data for this study, and to thank them for their assistance.

The farm-family budgets collected from the Tenant Purchase Section of Farm Security provide the hard core of basic data upon which this study is built. This is true for several reasons: (1) approximately two-thirds of the total cases were obtained from Farm Security rolls, (2) the complete budgets (farm and home) could be constructed more readily from the Farm Security records than from the College records (for example, information concerning debt repayment usually was not available from the College records), (3) Farm Security records were uniform over the four States, whereas the College records were different in each state, and (4) the farm and home records of the Farm Security clients are treated as one unit by the FSA, hence, were more easily constructed into a complete family budget than were the College records, where the farm records are usually collected and analyzed by one group of people and the home records by another group. This does not imply that the records collected from one source are superior or inferior to the other, but only that the records from the Farm Security source were more readily adapted to the needs of this particular study. The Farm Security Administration, however, in the course of administering its Tenant Purchase Program over the period 1940-42 changed the forms used in summarizing the Farm Family Account Book, and this complicated considerably the problem of obtaining consistent continuous records. Further, both the county supervisors and Tenant Purchase clients of the FSA were new at keeping records in the 1940-42 period, and some peculiar, unexplainable things turned up in the summary forms.

The question may be asked, Why were the farm-family budgets collected from the sources that have been described? Why not from other sources? The answer is simple. These sources were the only ones that would yield continuous family budgets either urban or farm, for the area involved. And if continuous income-expenditure data, other than Farm Security data, were desired, the area involved was limited almost to the four States selected--Minnesota, Wisconsin, Iowa, and Illinois.

As the sources of data used in the study are limited to select groups of Corn Belt farm families, it behooves us to examine the groups involved and determine whether they are representative of anything other than themselves. The Tenant Purchase families of the FSA, whose budgetary records provide the bulk of the material for this analysis, do not come from the bottom rung of the agricultural ladder as might be supposed. These families for the most part are young families who have made good as renters, but do not have sufficient capital to buy a farm of their own. These Tenant Purchase families are the younger enterprising families of the community to whom the FSA is willing to lend capital up to 100 percent of the value of the farm enterprise. Hence, we might expect this group of families to restrict their current living expenses in an effort to increase the equity in their farm operation. Further, these families

receive close supervision in drawing up their farm-and-home plan and in keeping their accounts, which no doubt would bias their allocation of income in the direction of reducing living expenditures and increasing their repayment of old debts.

The family budgets collected from the Colleges were taken from the records that the Experiment Stations and the Extension Services had in turn summarized from their farm-and-home-management route books. Thus, the question arises as to what type of farm families participate in keeping records on these routes. As far as the farm-management routes are concerned, the more settled, successful farmers participate. The farm-management route member is often a large operator who has a large equity in his farm and who is trying to obtain a more efficient operation through the device of keeping accounts. This generalization is not necessarily true with regard to the home-management routes but as the problem was one of combining the farm-and-home-management accounts where they happened to coincide on the same farm over the 3-year period, it naturally follows that characteristics of the farm-management routes must control the type of budgets that were obtained from the State Colleges. Among this group of farm families it would seem logical to expect greater emphasis on family living and less on the accumulation of capital.

But it was hoped that, by collecting family budgets from two groups that are separated by what would appear to be wide institutional differences, one set of data would provide a check on the other; and if the composition of family budgets proved to be similar in the two different farm groups, then one might argue that the findings were representative of all Corn Belt families. At least, one would have reason to believe that certain patterns of income-allocation were widespread among farm families of the Corn Belt.

Procedure.— This analysis of the changing composition of farm-family budgets was developed as follows: 2/

- (1) Possible sources of continuous, complete farm-family budgets were first surveyed, and the field of sources was narrowed to the Corn Belt States, and Minnesota, Wisconsin, Iowa, and Illinois.
- (2) A schedule was developed to take off the diverse farm-and-home budgetary information from the several sources of data within the area selected, and some experimental work was done to see whether the source data could be fitted onto one general type schedule.

2/ The authors will be glad to go into more detail with interested parties regarding methods of handling the data, tabulating forms, etc.

- (3) The actual budgetary data were collected from the field offices of the Farm Security Administration and from the State Colleges of Agriculture during the fall of 1945.
- (4) The schedules collected in the field were hand sorted and reviewed by the authors to get a feel of the data, and to discover basic relationships existing within the data, before the data were frozen on punch cards.
- (5) The farm-family budgets were edited, coded, and punched onto machine-tabulating cards.
- (6) The budgets were tabulated and arranged into tables to provide evidence for or against certain hypotheses held at the inception of the study, and to fill out certain of the relationships discovered during the hand-sorting and review stages.
- (7) A preliminary report was prepared in the spring of 1946 pulling together the principal findings of the study. This report carries considerable detail, including classifications of the data by States.
- (8) On the basis of comment and criticism of the preliminary report the present summary report was prepared.

Definitions.-- The budgetary items listed on the collection schedule are defined as follows (see enclosed sample, p.7):

- (1) Gross cash farm income: total receipts from farm operations.
- (2) Cash operating expenses: total expenses incurred in operating the farm including interest on debt, taxes, and operating credit not paid off.
- 3) Net cash farm income: item 1 minus item 2.
- (4) Value of home production: sum of items 5 and 6.
 - (5) Food and fuel: the value the farmer could get for the produce used at home if sold at the farm.
 - (6) House rent: 10 percent of the replacement value of the house.
- (7) Off-farm income: any income earned and received by a member of the family from a source off the farm.

- (8) Net family income: sum of items 3, 4, and 7.
- (9) Family expenditures: sum of items 10, 11, 12, 13, and 14.
 - (10) Food: all food purchased off the farm (including credit).
 - (11) Clothing and personal: all clothing and personal items purchased (including credit).
 - (12) Household: includes house operating expenses, minor house-furniture and equipment purchases (including credit).
 - (13) Medical care: all expenditures for health (including credit).
 - (14) Other: any family living expenditures not included in items 10, 11, 12, and 13.
- (15) Family expenditures adjusted: sum of items 4 and 9.
- (16) Capital expenditures: sum of items 17, 18, 19 and 20.
 - (17) Sale of capital goods: value received on trade or sale of any capital goods--a negative item.
 - (18) Livestock: actual cost of livestock.
 - (19) Land, building, and improvement: actual cost of land or construction.
 - (20) Machinery, equipment, and other: actual cost of machinery and equipment, and any capital expenditures not included in items 18 and 19.
- (21) Debt repayment: the amount of reduction of old debts--debts contracted prior to the year under consideration.
- (22) Total outlay: sum of items 15, 16, and 21.
- (23) Liquid-asset position: item 8 minus item 22.
- (24) Size of household: includes all members of the family, immediate or otherwise, living in the farm household--but not hired help.

Some explanation regarding the concept of a farm family budget employed here may be in order as well as a further elaboration of certain items included in the farm budget. Except for the category, Value of Home Production, the budget is constructed on a strictly cash basis. The effects of inventory changes due to either price or physical changes

on farm income are ignored.^{3/} The budget for each year is treated as a separate entity--it portrays simply cash income and cash outlay for the year in question--accounting on an accrual basis is not involved.

The item "sale of capital goods" listed under capital expenditures may be a little confusing--it is a negative item as used in the budget. It seemed incorrect to add receipts from the sale of capital goods to cash farm income, hence it was placed under the category, Capital Expenditures, as a negative item.

A concept of pure savings does not emerge from this budget; the nearest we come to it is in the balancing category, Liquid Asset Position. The Liquid Asset Position is derived by subtracting Total Outlay from Net Family Income, which yields a measure of the increase or decrease of cash on hand for the year's operations. It represents something less in substance than savings in the pure economic sense, for it is the difference between Total Outlay and Net Family Income. And Total Outlay is made up of the three categories (1) Family Expenditures Adjusted, (2) Capital Expenditures, and (3) Debt Repayment, the last two of which represent savings in an economic sense. But each of the three categories are treated as outlay in this analysis because each competes directly for the disposable income of the farm family.

^{3/} An attempt was made early in the study to take account of inventory changes, with the consequent effects on farm income, but certain key information necessary for such an adjustment could not be obtained.

☐ State _____
☐ County _____
☐ Name _____

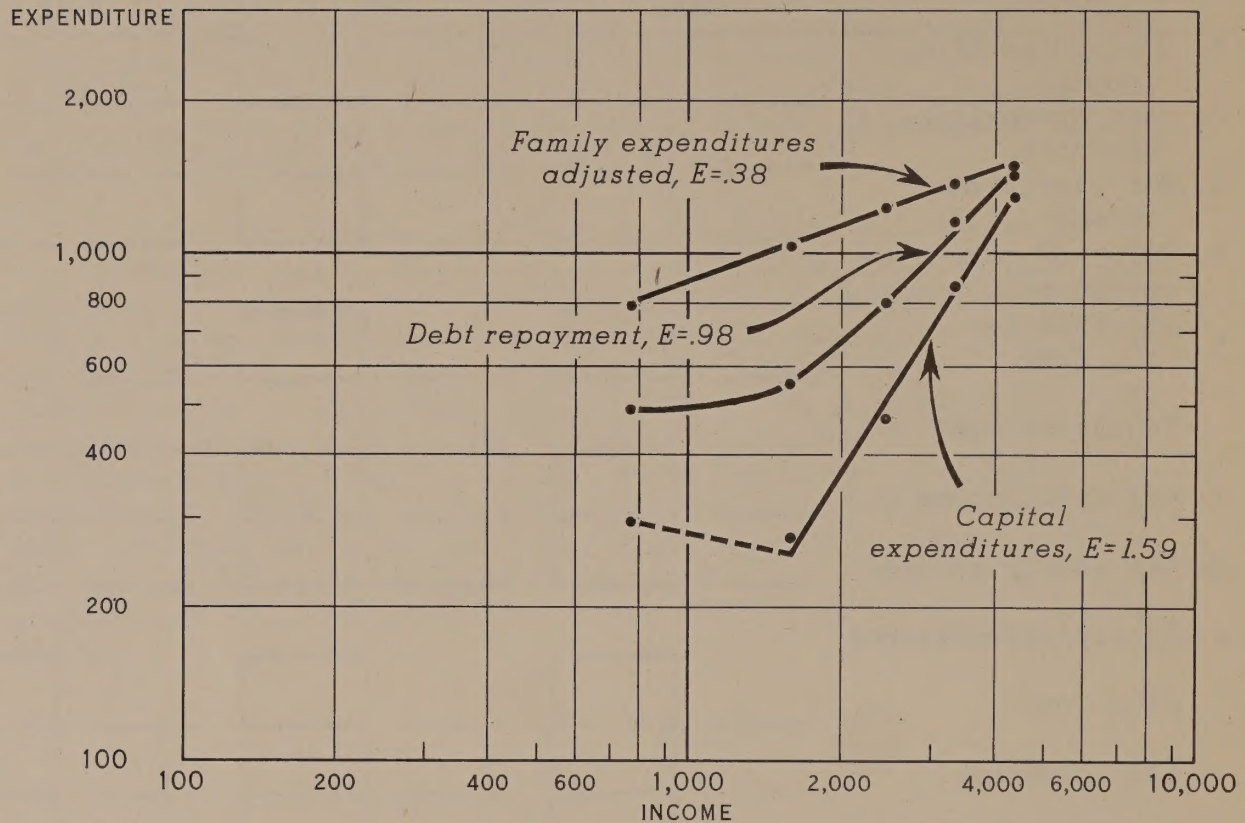
- 7 -

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FARM FAMILY BUDGET RECORD CARD
 Bureau of Agricultural Economics

Items	1940	1941	1942
1. Gross cash farm income			
2. Cash operating expenses			
3. Net cash farm income			
4. Value of home production			
(5) food and fuel			
(6) house rent			
7. Off farm income			
8. Net family income			
9. Family expenditures			
(10) food			
(11) clothing			
(12) household			
(13) medical care			
(14) other			
15. Family expenditures adjusted			
16. Capital expenditures			
(17) sale of capital goods			
(18) livestock			
(19) land, building & improvement			
(20) mach., equip., & other			
21. Debt repayment			
22. Total outlay			
23. Liquid asset position			
24. Size of household			

MAJOR CATEGORIES OF OUTLAY RELATED TO INCOME, WITH ELASTICITIES, FSA DATA, 1940



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46160

BUREAU OF AGRICULTURAL ECONOMICS

Figure 1.- Plotting the FSA expenditure data against net family income on double logarithmic paper, straight-line relationships appear appropriate in two of the three major categories of outlay (Family Expenditures Adjusted and Capital Expenditures). This means that the income elasticities of expenditure are constant at .38 (approximate) for Family Expenditures Adjusted over the income range 0 to \$4,999 and at 1.59 (approximate) for Capital Expenditures over the income range \$1,000-\$4,999. In the case of Debt Repayment, which falls into a curvilinear relationship, the elasticity of outlay at \$3,000 income is .98 with the elasticity increasing above and decreasing below that point. And since an income elasticity of unity means that the rate of income change is just equal to the rate of expenditure change, given a change in the income of these FSA families, the proportionate change in expenditure associated with it is much less for family living, much greater for capital expenditures, and constantly changing for debt repayment (plotted data taken from table 5).

TRENDS AND TENDENCIES

Static Analysis

Family Expenditures.— When we relate family living or consumer expenditures to income for the FSA data we discover that expenditures increase absolutely, but not so rapidly as income. Stated differently, the percentage of disposable income devoted to family living declines as we ascend the income scale (tables 5-10). It makes some difference which year we take, for the FSA families spent a larger proportion of their income for family living in 1942 than they did in 1940; and it makes some difference which item of family living we take, for the more necessary items like food decline percentagewise more rapidly than luxury type items, as incomes rise. But the percentage contours of expenditures for each year and for each item of expenditures decline persistently and consistently as incomes rise. For example, when we relate Family Expenditures Adjusted to Net Family Income for the FSA data we observe:

	Income Classes							
	<u>\$1,000- 1,999</u>	<u>\$2,000- 2,999</u>	<u>\$3,000- 3,999</u>	<u>\$4,000- 4,999</u>	<u>\$5,000- 5,999</u>	<u>\$6,000- 6,999</u>	<u>\$7,000- 7,999</u>	<u>\$8,000- 9,999</u>
	Expenditures as a percent of income ^{4/}							
1940	65.0	50.2	41.3	34.5				
1941	67.0	52.4	43.8	37.6	31.4			
1942	72.4	56.4	47.4	39.9	34.0	31.2	28.6	22.4

Within the context of the above percentage aggregates we find that the FSA families allocate, on the average, approximately 11 percent of their income to the purchase of food in the \$1,000-\$1,999 net family income class and that percentage falls to about 6 percent in the \$4,000-\$4,999 income class. Food expenditures are slightly lower in 1940 and slightly higher in 1942 than the indicated average, but ascending the income scale the percentage contours of expenditure parallel each other year by year. In the case of expenditures for the item, clothing and personal, the percentage of income allocated to it approximates 7 percent in the \$1,000-\$1,999 income class and declines to 5 percent in the \$4,000-\$4,999 income class for each of the 3 years involved. Household operating expenditures approximate in level and contour those for clothing and personal. Expenditures for medical care, also, decline as we ascend the income scale, but not so rapidly and so consistently.

^{4/} Much of the percentage increase in expenditures for any given income-class increase between 1940 and 1942 is obviously due to a rise in prices, but as this is not a cost-of-living study the income-expenditure data are not and will not be deflated. It is the effect of income changes, real or money, that we are attempting to measure and since for any given year all families are in a rough measure equally affected by price changes no attempt will be made to separate out the price influence.

The picture changes noticeably with the item "other", which is largely a recreational item. Expenditures for "other" decline as incomes rise, but at a very slow rate. In other words, as we move from the more necessary item, food, to the less necessary item of recreation, we discover that the tendency for consumer expenditures to decline relative to income is less pronounced. Thus, these FSA data substantiate two basic propositions in economics: (1) consumer expenditures expand with rising incomes, but at a declining rate, and (2) the more necessitous the items involved, the more precipitous the declining rate of expenditure becomes. In more technical terminology, the income-elasticity of consumer expenditures in total is rigidly inelastic, but the elasticities of expenditure of individual items comprising the total vary from food, which is severely inelastic, to "other" which approaches unity (these relationships may be seen graphically in figures 1 and 2).

The College data conform to the FSA data with one important difference. For each income class, as we ascend the income scale, the families from whom the State Colleges have collected records allocate a larger proportion of their income to family living than do the FSA families (see tables 11-16). The percentage contours of expenditures ascending the income scale fit into the same general pattern as the pattern described for the FSA families, but they (the expenditure contours for the College data) are at a higher level at each income class. For example, Family Expenditures Adjusted related to Net Family Income for the College data are as follows:

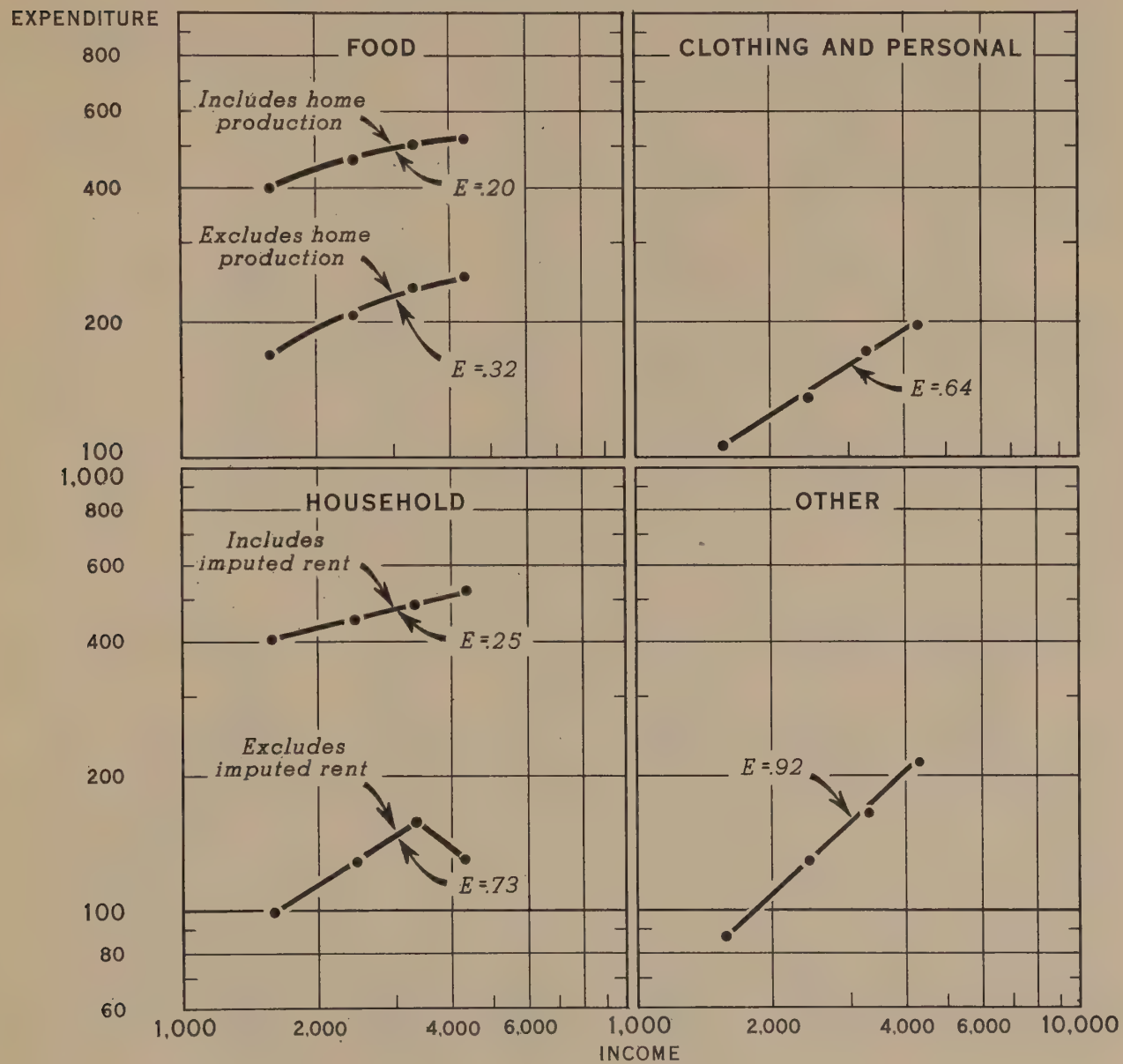
	Income Classes							
	\$1,000- 1,999	\$2,000- 2,999	\$3,000- 3,999	\$4,000- 4,999	\$5,000- 5,999	\$6,000- 6,999	\$7,000- 7,999	\$8,000- 9,999
	Expenditures as a percent of income							
1940	91.1	67.1	56.0	48.8	50.0	41.3		
1941	98.5	66.7	54.9	44.0	42.2	34.8	41.9	36.4
1942	94.8	69.4	56.8	47.1	40.7	37.6	36.4	33.4

In brief, the College data support the basic propositions formulated in the FSA section, but the families represented by the College data being better established than the FSA families can afford to spend a larger proportion of their income on family living. 5/

The FSA budgets classified by household size fail to reveal the sharply defined trends in the allocation of income that were evident from the income classification (tables 17-20). The dollar value of expenditures for (1) food and (2) clothing and personal,

5/ Measures of the dispersion around the expenditure averages (those presented in tables 3-14) upon which this discussion is based may be reviewed in the Appendix under Measures of Central Tendency.

EXPENDITURES FOR CONSUMER ITEMS RELATED TO INCOME WITH ELASTICITIES, FSA DATA, 1940



U. S. DEPARTMENT OF AGRICULTURE

NEG. 45161 BUREAU OF AGRICULTURAL ECONOMICS

Figure 2

* Plotted data taken from table 5.

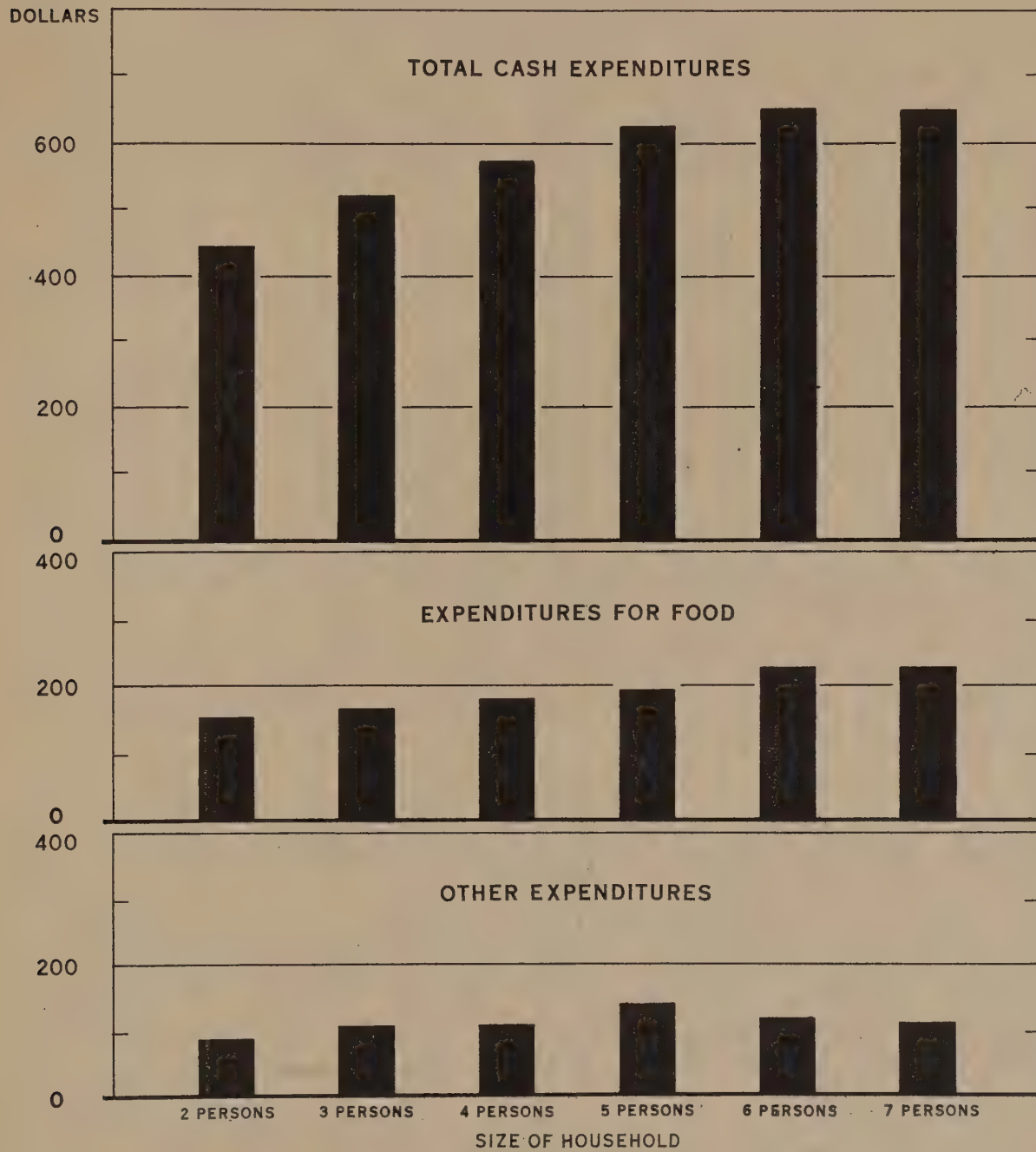
increase consistently as the size of household is enlarged, although the rate of increase is not so rapid as might be expected. And the category, Family Expenditures Adjusted, which includes total expenditures for family living plus the value of home production, increases consistently as the size of household is enlarged, but there the clear-cut trends in the allocation of income end. Holding income constant does not change the picture; expenditures for necessitous items increase with increases in the number of persons in the household, but other consumer items do not appear to be responsive to the independent variable household size, although there is an unexplainable tendency for expenditures on the luxury item "other" to first increase and then decline as the size of household grows from a minimum of 2 members to the maximum of 7 members (fig. 3).

The College-collected budgets classified by household size for the year 1940 yield the same meaningful and the same lack of meaningful family-expenditure relationships that we found for the FSA data (tables 21-26). Expenditures for necessary items, food, and clothing and personal, increase as the size of household grows, whereas, expenditures for the remaining family-living items fail to form any consistent pattern. When income is held constant, expenditures for (1) food and (2) clothing and personal, increase in a sharply defined way with increases in the number of persons in the household; also a significant trend is evident for household expenditures, but there the consumer data cease to fall into consistent patterns. In sum, the findings based on the College budgetary data are in substantial agreement with those isolated under the FSA experience, although it would seem that the trends are somewhat less clear-cut.

Capital Expenditures.- The income-expenditure relationships that evidence themselves when capital expenditures are related to income differ sharply from those observed in the family-living section. First, the percentage of income allocated to capital expenditures actually increases in certain cases as we ascend the income scale. Second, although the slope of the capital-expenditure contour is upward in certain cases, it is not so in all cases. Ascending the income scale, we find that the percentage contours of expenditure fan out in an arc--sloping upward, downward, and holding constant. Third, the relationships themselves are not so clear-cut and well-defined as they were in the family-expenditure section.

Relating capital expenditure to income in the FSA budgetary data we discover a definite tendency for the percentage of income allocated to capital expenditures to increase as incomes rise (tables 5-10). The FSA farm families increase their purchases of capital goods so rapidly, ascending the income scale, that the

FAMILY LIVING EXPENDITURES, TOTAL CASH AND SELECTED ITEMS,
RELATED TO SIZE OF HOUSEHOLD, FSA DATA, 1940



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46162

BUREAU OF AGRICULTURAL ECONOMICS

Figure 3

* Plotted data taken from table 17.

expenditure relatives increase as incomes increase. For example, when we relate the category Capital Expenditures to Net Family Income for the FSA data we observe:

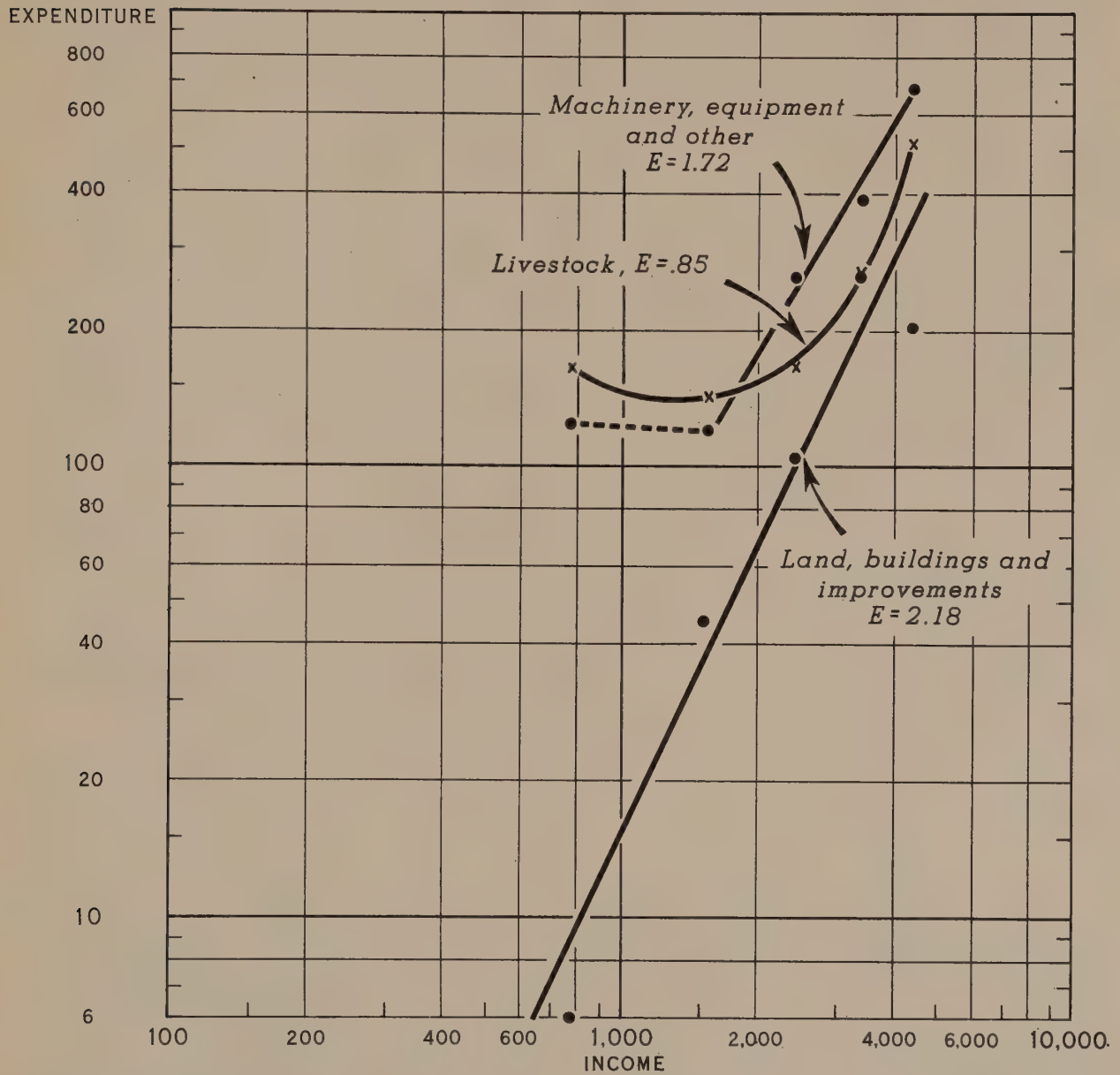
	Income Classes							
	\$1,000- 1,999	\$2,000- 2,999	\$3,000- 3,999	\$4,000- 4,999	\$5,000- 5,999	\$6,000- 6,999	\$7,000- 7,999	\$8,000- 9,999
	Expenditures as a percent of income							
1940	17.3	19.4	25.8	30.0				
1941	23.1	26.0	26.9	30.1	40.8			
1942	17.2	19.7	22.0	24.9	24.0	18.2	27.7	17.9

It is evident that capital expenditures in total expand relative to income, but this over-all tendency loses its sharply defined character when we look at individual capital items. The disposable income allocated to the purchase of livestock rises from 9 percent in the \$1,000-\$1,999 income class to 12 percent in the \$4,000-\$4,999 income class in 1940, but in 1941 the percentage allocation holds constant over the same income range. In the case of "land, buildings, and improvements" the percentage of income allocated would seem to rise from something approximating 3 percent in the \$1,000-\$1,999 income class to something between 5 and 8 percent in the \$4,000-\$4,999 income class, depending upon the year in question. And finally with respect to "machinery, equipment, and other" the trend is more consistently upward than in the case of the former two items, but it varies more between years.

For example, the percentage of income allocated to the purchase of "machinery, equipment, and other" increased from something over 7 percent in the \$1,000-\$1,999 income class to something over 15 percent in the \$4,000-\$4,999 income class in the year 1940. But in the year 1941 the percentage of income allocated to the purchase of "machinery, equipment, and other" rose from 13 percent in the \$1,000-\$1,999 income class to about 16 percent in the \$4,000-\$4,999 income class. Thus we see that, although the percentage contours of expenditure are upward, the contours themselves are rather vaguely defined (these relationships may be seen graphically in figure 4).

Among those families from whom the State Colleges have collected farm and home records the income-expenditure relationships for capital goods vary considerably from those described for the FSA families. On balance, the percentage of income allocated to the purchase of capital goods declines as incomes rise (tables 11-16).

EXPENDITURES FOR CAPITAL ITEMS RELATED TO INCOME, WITH ELASTICITIES, FSA DATA, 1940



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46163 BUREAU OF AGRICULTURAL ECONOMICS

Figure 4

* Plotted data taken from table 5.

This relationship is observable when the category, Capital Expenditures, is related to Net Family Income for the College data:

	Income Classes							
	\$1,000- 1,999	\$2,000- 2,999	\$3,000- 3,999	\$4,000- 4,999	\$5,000- 5,999	\$6,000- 6,999	\$7,000- 7,999	\$8,000- 9,999
	Expenditures as a percent of income							
1940	46.0	35.5	28.1	26.4	23.7	26.2		
1941	76.8	30.3	32.2	29.7	25.6	23.8	20.6	17.3
1942	41.4	25.4	28.8	19.9	17.9	19.7	20.8	20.9

The relationships for individual items, however, are less consistent and more erratic than those described for the FSA families. The percentage of income allocated to the purchase of "machinery, equipment, and other" in the College data declines rather consistently as we ascend the income scale, but the percentage of income allocated to the purchase of (1) livestock, and (2) land, building and improvements, fluctuates so erratically that clear relationships of expenditure to income fail to emerge.

When we shift from income to household size as the independent variable, and hold income constant, a downward trend in the category, Capital Expenditures, may be observed as the number of persons in the household increases for the FSA data, but that trend is not too clear (tables 17-20). Insofar as such a downward trend does exist, however, it is in line with what might be expected, for the moderate increases in the category, Family Expenditures Adjusted, must come at the expense of some other type of outlay when income is held constant, as it is in this case. Meaningful relationships of the number of persons in the household to individual capital items, however, fail to evidence themselves.

The downward trend in total expenditures for capital associated with an increase in household size observed in the FSA data is not present in the College data (tables 21-26). In fact, when income is held constant it would appear that capital expenditures in total tend to remain constant through the household sizes 2 to 5 members, and then shoot up in the larger household sizes of 6 and 7 members. In sum, it would seem that household size is a less significant factor in the allocation of income between different categories of expenditure than income itself.

Debt Repayment.- The relationship of Debt Repayment to income exhibits a characteristic that is not common to either family expenditures or capital expenditures. The percentage of income allocated to the repayment of old debts remains approximately constant throughout the significant range of income classes. In other words, the FSA families 6/ increase their outlay for the repayment of old debts

6/ Data on debt repayment were not available at two of the State Colleges, hence, the category could not be filled out in the College budgets.

at each ascending income class roughly in proportion to the income increases itself. This relationship may be seen when Debt Repayment is related to Net Family Income for the FSA data:

Income Classes

	<u>\$1,000- 1,999</u>	<u>\$2,000- 2,999</u>	<u>\$3,000- 3,999</u>	<u>\$4,000- 4,999</u>	<u>\$5,000- 5,999</u>	<u>\$6,000- 6,999</u>	<u>\$7,000- 7,999</u>	<u>\$8,000- 8,999</u>
	Repayment as a percent of income							
1940	35.4	32.9	34.5	33.4				
1941	34.9	33.6	29.7	30.3	28.5			
1942	30.8	29.6	30.2	28.1	37.3	39.2	24.8	43.5

Liquid Asset Position.— The category, Liquid Asset Position, is a residual. It represents the difference between Total Outlay (Family Expenditures Adjusted plus Capital Expenditures plus Debt Repayment) and Net Family Income. Hence, it may be used as an indicator of the financial progress of the farm family, for it shows for any given year whether families are increasing or depleting their cash on hand. When we subtract Total Outlay from Net Family Income for each significant income class we discover that the \$3,000-\$3,999 income class is, roughly, the break-even point.

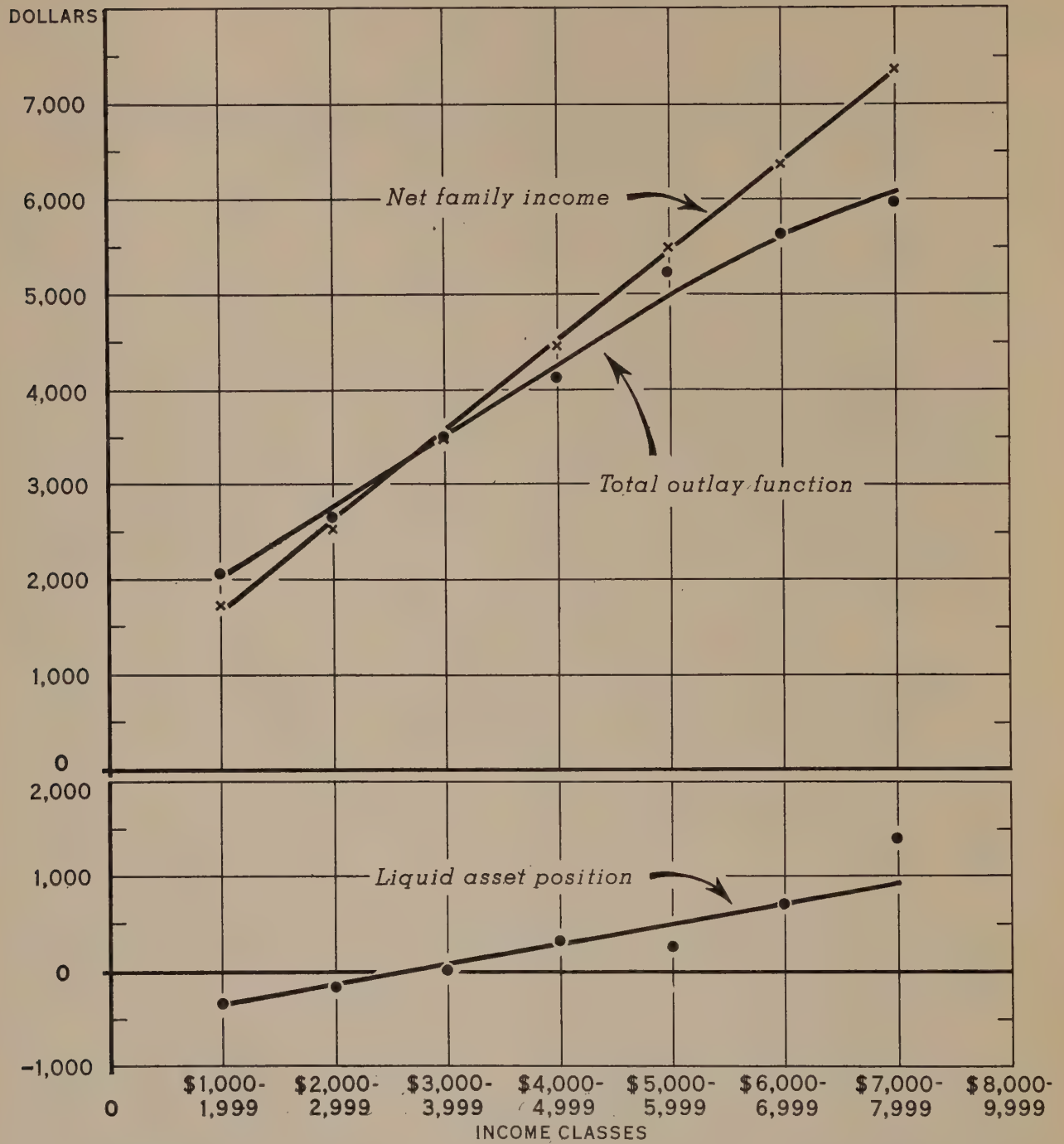
Income Classes

	<u>\$1,000- 1,999</u>	<u>\$2,000- 2,999</u>	<u>\$3,000- 3,999</u>	<u>\$4,000- 4,999</u>	<u>\$5,000- 5,999</u>	<u>\$6,000- 6,999</u>	<u>\$7,000- 7,999</u>	<u>\$8,000- 8,999</u>
	Liquid Asset Position (dollars)							
1940	-279	- 60	-53	93				
1941	-414	-297	-13	88	- 26			
1942	-351	-143	15	315	255	722	1394	

With few exceptions these FSA families below the \$3,000-\$3,999 income class are depleting their cash on hand, whereas above that class they are making additions to cash on hand (fig. 5).

The Liquid Asset Position should not be confused with the savings position. Taking the usual economic definition of savings, as the difference between disposable income and consumer expenditures, it is evident that the FSA families made sizeable savings in each of the 3 years under consideration for each income class above and including the \$1,000-\$1,999 income class. Savings made under the headings of Capital Expenditures and Debt Repayment greatly exceed the depletion of liquid assets in the income class \$1,000-\$1,999 and \$2,000-\$2,999; hence, the families in these two income classes actually made substantial savings even as their liquid-asset position deteriorated. And, of course, above the \$3,000-\$3,999 class the indicated large capital expenditures plus debt repayments added to the increases in liquid assets make for a high rate of savings.

THE TOTAL OUTLAY FUNCTION AND THE LIQUID ASSET POSITION, FSA DATA, 1942



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46164 BUREAU OF AGRICULTURAL ECONOMICS

Figure 5

* Plotted data taken from table 9.

It is of some significance, also, that whenever the category Debt Repayment exceeds a negative dollar value shown under the Liquid Asset Position, those families are improving their financial position. It seems clear that the FSA families, regardless of the year taken, made outlays for Debt Repayment considerably in excess of the negative dollar value indicated for the Liquid Asset Position at and above the \$1,000-\$1,999 income class. In other words, for the period studied, the FSA families were increasing the equity in their farm and home enterprise once they reached or passed the \$1,000-\$1,999 income class. 7/

7/ The income-outlay relationships of the Static Analysis where the income variable used is a net family income concept may be compared with the income-outlay relationships of the Appendix under Outlays Related to Cash Income, where the income variable used is a net cash income concept.

Dynamic Analysis

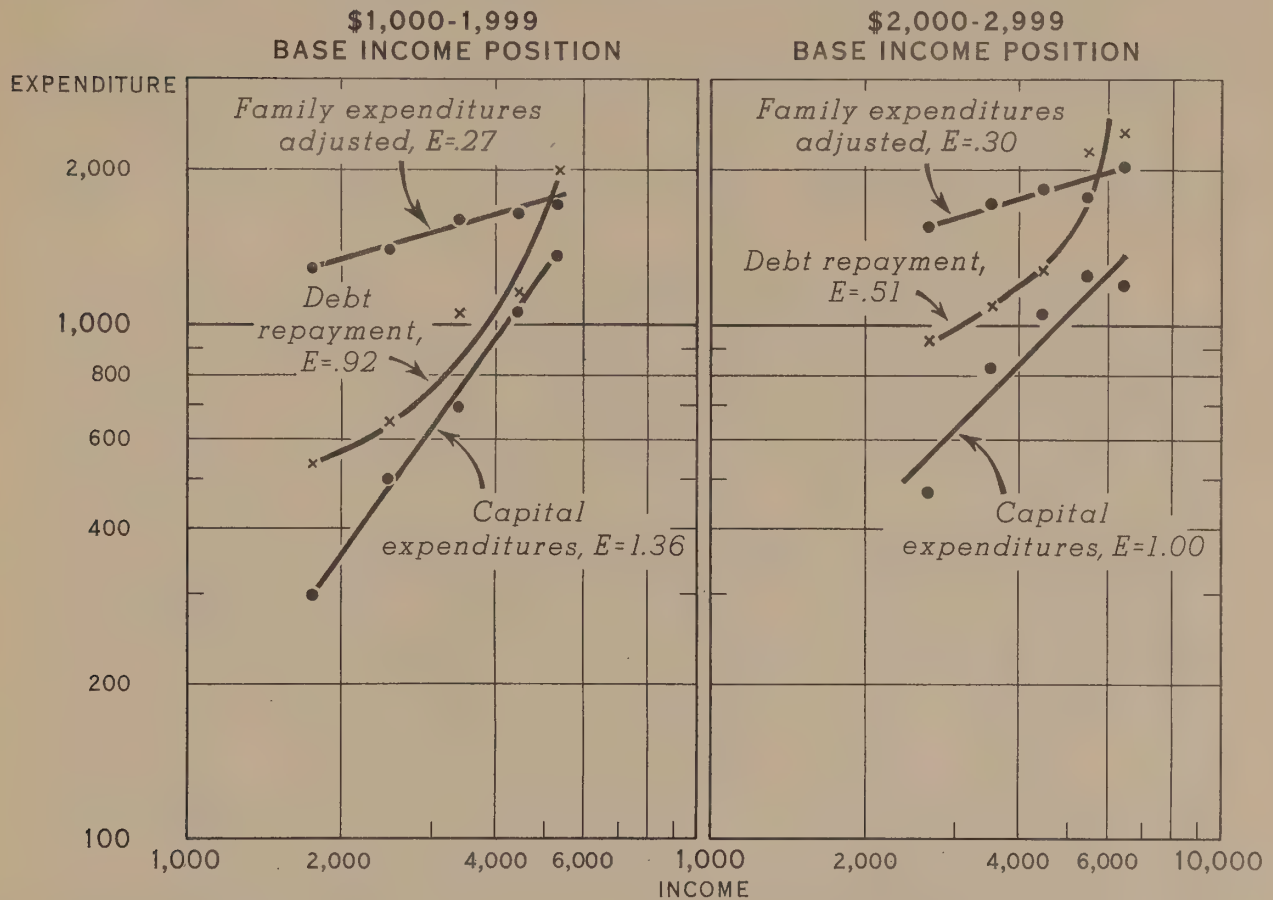
Average Income Relationships.-- We are now in a position to observe the behavior of FSA tenant-purchase families in the allocation of income as they experience changes in income. This behavior is isolated and is defined first by sorting the family budgets into their 1940 income classes and then by resorting the budgets of each 1940 income class according to their 1942 income positions, to yield a series of 1942 average budgets--average budgets made up of cases moving from a given 1940 income position to some new 1942 income position. As might be expected, Total Outlay increased absolutely as families experienced rising incomes between 1940 and 1942. And the trend in expenditures (dollar value) for each of the principal categories of outlay--Family Living Adjusted, Capital Expenditures, and Debt Repayment--is consistently upward as Net Family Incomes increased (tables 27-29).

For example, in 1940, the income class with the greatest frequency was \$1,000-\$1,999 (with 287 cases), when 110 of those cases experienced an income increase which moved them to the \$2,000-\$2,999 class in 1942 their expenditures in all items increased over the 1940 pattern, and when 87 of those cases experienced a rise in income which moved them to the \$3,000-\$3,999 class, their expenditures in all items increased over the \$2,000-\$2,999 pattern, and so on for each group. A neat staircase of dollar expenditures is formed for each expenditure item, and certainly for the global categories, when the average budgets are arrayed in a continuous series by ascending order of Net Family Income.

The increase in Total Outlay associated with rising incomes is not, however, proportional to the rise in income, and by principal category of outlay the rate of expenditure increase is highly uneven (the extreme variations in income elasticities of expenditure, as between family expenditures on one hand and capital expenditures on the other, may be seen in figure 6). As the FSA families experienced rising incomes over the period 1940-42, they increased their dollar expenditures for capital goods and debt repayment much more rapidly than they did for consumer goods and services.

Converting the expenditure data to relatives, expenditures for consumer goods and services in total, and for each item comprising the total, with the possible exception of "other" decline as the 1942 average budgets are arrayed in ascending order of Net Family Income (table 1). In other words, starting from the same base-income position in 1940, say \$1,000-\$1,999, we find that as family units move out of that class and into higher classes, expenditures for consumer goods and services do not increase in proportion to the rise in income. The elasticities of expenditure are exceedingly low--inelastic--for each consumer item except "other" which approaches unity and significantly is the only item that might be considered a luxury item (fig. 7).

MAJOR CATEGORIES OF OUTLAY RELATED TO 1942 INCOMES FOLLOWING INCOME INCREASES FROM DIFFERENT 1940 BASE INCOME POSITIONS, FSA DATA



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46165

BUREAU OF AGRICULTURAL ECONOMICS

Figure 6.- Regardless of the base-income position it seems clear that the income elasticity for the category, Family Expenditures Adjusted, is smaller in the dynamic analysis than it is in the static analysis (compare this figure with figure 1). But the differences in elasticity are not large. This small but consistent difference observed in the case of Family Expenditures Adjusted holds also for the categories, Debt Repayment and Capital Expenditures (plotted data taken from tables 27 and 28).

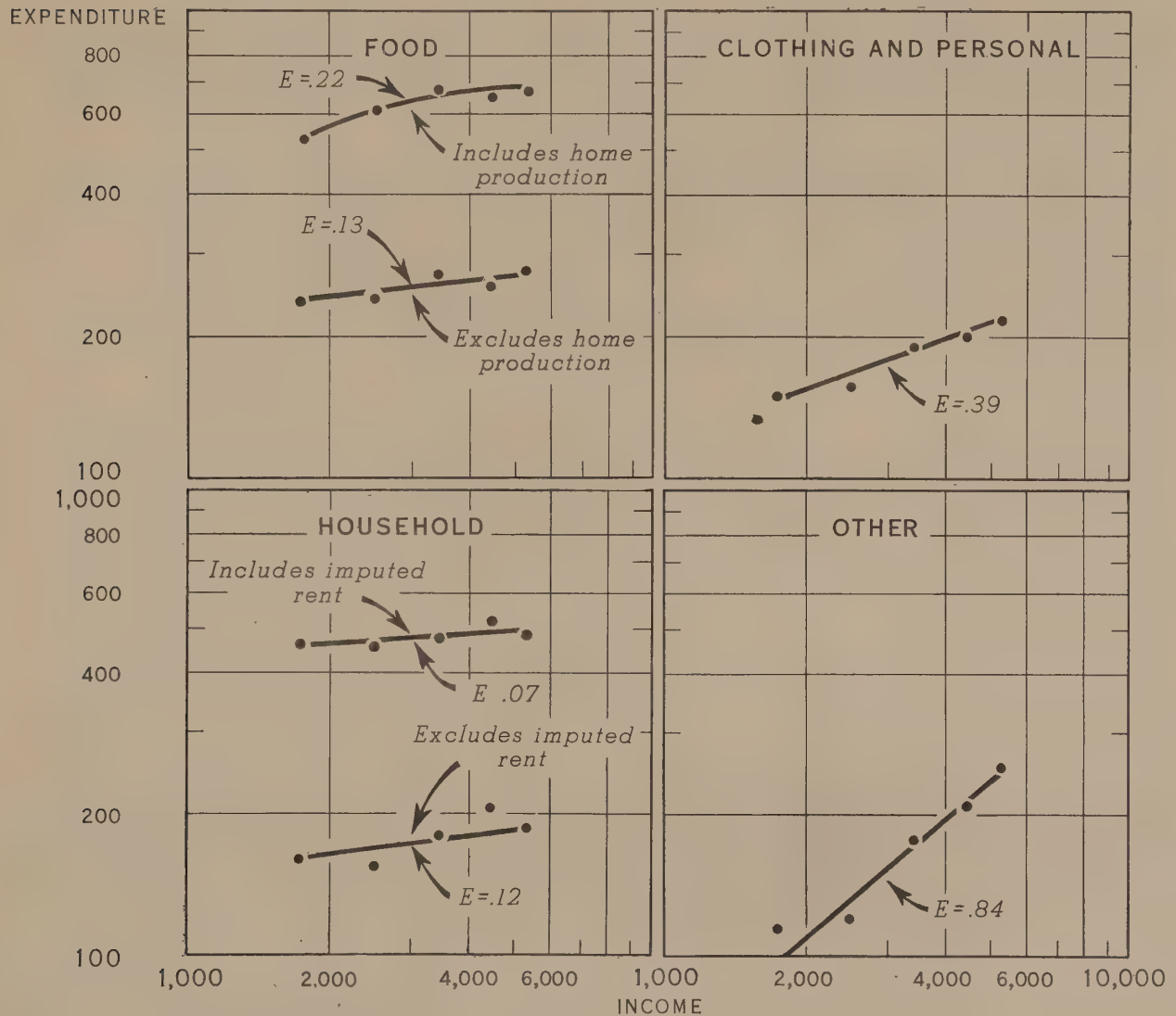
These dynamic income-expenditure relationships for family living items agree in broad outline with those isolated in the static analysis. That is, the slope of the percentage contours of expenditure move in the same general direction. But there is one important difference between the income-expenditure relationships of the dynamic section and those of the static section--the elasticities of expenditure are lower for each item of family living in the dynamic analysis (compare figs. 2 and 7). In other words, the rate of increase in expenditure for consumer goods and services associated with increases in income is less rapid in the dynamic classification than in the static classification (compare the percentage contours of expenditure for family living items in table 1 with those in tables 6, 8, and 10).

These findings are in line with most hypotheses regarding the movement of the consumption function. It is commonly asserted that expenditures for consumer goods and services fail to expand proportionately with income increases. The static data bring out this point clearly. It is also commonly asserted, given a change in income, that families do not immediately reorganize their budget to conform to the norm of the new income position, hence, expenditures for consumer goods and services in a dynamic situation are likely to be smaller, income class by income class, as we ascend the income scale, than in a static situation. These continuous data present tangible evidence of this latter tendency, wherein the elasticities of expenditure tend in most cases to be lower than the corresponding elasticities in the static section.

The trend line of capital-goods expenditure on a relative basis moves in a somewhat different direction from that described for consumer expenditures. As the FSA farm families experience income increases they tend to spend more than or at least a proportionate amount (depending upon the original income position) of that income increase on capital goods. In short, the percentage contour line for capital-goods expenditure is horizontal to upward, income class by income class, for those families who experienced a rise in income between 1940 and 1942. On a relative basis, debt repayment remains constant over the entire range of income but it exhibits a tendency to sag in the middle-income classes. The FSA farm families tend to allocate about the same proportion of their income to Debt Repayment at either end of the income scale, but that proportion declines in the middle-income area.

The rate of increase in expenditures for capital goods associated with increases in income is less rapid in the dynamic classification than in the static classification. Differences in the rate of expenditure between the dynamic and the static classification, however, are not so pronounced as in the case of consumer goods and services. Stated differently, there is a tendency,

EXPENDITURES FOR CONSUMER ITEMS RELATED TO 1942
INCOMES FOLLOWING INCOME INCREASES FROM THE 1940
BASE INCOME POSITION \$1,000-1,999, FSA DATA



U. S. DEPARTMENT OF AGRICULTURE,

NEG. 46166

BUREAU OF AGRICULTURAL ECONOMICS

Figure 7

* Plotted data taken from table 27.

although not a sharply defined tendency, for the percentage contours of capital expenditures to decline more rapidly ascending the income scale in the dynamic analysis than in the static analysis (compare table 1 with tables 6, 8, and 10). In the case of Debt Repayment, however, the rates of increase in outlay associated with rising incomes appear to be similar in character in both the dynamic and the static classifications.

Total outlay--a composite of Family Expenditures Adjusted, Capital Expenditures, and Debt Repayment--behaves in the dynamic analysis in a consistent and meaningful manner. Taking the \$1,000-\$1,999 income class in 1940 as an example, we see that those families who remained in that class over the 3-year period increased their total outlay from 118 percent to 122 percent--a 4-percent deterioration in the Liquid Asset Position no doubt due to the rising price level which this group did not share in--but for every group, the one that moved up one class, the one that moved up two classes, and so on, total outlay declines from 122 percent for the \$1,000-\$1,999 income class to 95 percent for the \$5,000-\$5,999 income class. 8/

Reviewing these FSA data illustrating the changing composition of farm-family budgets several significant relationships become clear: (1) given a group of farm families originating at the same base-income position, and an economic situation where a portion of that group moves up one income class, another moves up two income classes, another three classes, etc. the expenditures for most individual items increase consistently in magnitude as the size of income increase itself expands, (2) concurrent with expanding total disposable incomes, farm families tend to spend smaller and smaller proportions of their enhanced incomes on consumer goods and services, and (3) Total Outlay falls on a relative basis as net family incomes become larger even though the categories Capital Expenditures and Debt Repayment may be said to hold constant or even to increase slightly. The consistency of these dynamic trends point up the force of income, or better, the force of changes in the size of income, in the allocation of that income between different categories of outlay. 9/

The College data provide some interesting comparisons to the trends and relationships pointed out in the dynamic description of the FSA budgets--also some checks to the interpretation given there. Smooth trends and consistent relationships of expenditure to income are not so evident in the dynamic description of the College data as they were in the FSA data (tables 30-32). As we observe the movement of the College data families from 1940 base-income positions to new higher 1942 income positions, we find that

8/ These income-expenditure relationships may be seen in a different type classification in table 33, where the principal classifying item is size of income change.

9/ Measures of the reliability of the averages on which these observations are based may be seen in the Appendix under Measures of Central Tendency.

Table 1.- Income-Outlay patterns expressed as a percentage of net family income when family budgets of the 1940 income class \$1,000-\$1,999 are distributed into 1942 income positions, FSA data

Budget Items	1940 : 1942 budgetary data by income classes									
	: Budgetary Data: \$1,000 : \$2,000 : \$3,000 : \$4,000 : \$5,000		: \$1,000-\$1,999: to : to : to : to		: Income Class : \$1,999 : \$2,999 : \$3,999 : \$4,999 : \$5,999		(Budget Frequency) 1/		: 287 : 26 : 110 : 87 : 48 : 10	
Net family income	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures	10.7		13.5	9.6	7.9	5.7	5.2			
food										
clothing	6.5		8.5	6.2	5.5	4.4	4.1			
household	6.3		9.2	6.1	5.2	4.6	3.5			
medical care	2.1		2.7	2.0	2.3	1.4	1.5			
other	5.5		6.5	4.8	5.1	4.6	4.7			
Family expenditures adjusted	65.0		74.4	55.7	46.6	36.8	32.1			
Capital expenditures	2/ 17.3		2/ 17.2	2/ 20.1	2/ 20.2	2/ 23.9	2/ 25.4			
sale of capital goods	-2.4		-1.4	-0.6	-2.5	-1.0	-0.9			
livestock	" 9.0		" 6.2	" 8.6	" 6.8	" 8.6	" 7.0			
land, building and improvement	" 2.9		" 3.2	" 3.2	" 5.1	" 4.1	" 5.2			
machinery, equipment, and other	" 7.6		" 9.8	" 9.2	" 10.8	" 12.3	" 13.9			
Debt repayment	35.4		30.9	26.0	30.6	25.7	37.7			
Total outlay	117.7		122.5	101.8	97.4	86.4	95.2			
Liquid asset position	-17.7		-22.5	-1.8	2.6	13.6	4.8			

1/ Classes with a budget frequency of less than 6 are not shown

2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

there is a tendency for both consumer and capital expenditures to increase absolutely as incomes increase, but there are numerous exceptions to this tendency, particularly for individual items listed under the major categories.

We cannot say, for example, for any line of expenditure, not even food, given 91 observations in the \$1,000-\$1,999 income class in 1940, that the 14 families who moved up one income position by 1942 would spend absolutely more than the 8 who experienced no change in income, that the 15 families who moved up two income classes by 1942 would spend more than the group that moved up one income position, and so on up the income scale. But even though a clear-cut stepladder of dollar expenditures does not exist, it would be incorrect to overlook the tendency for the expenditure pattern to be correlated to income.

The somewhat indefinite upward trends in dollar expenditures associated with rising incomes, are on a relative basis converted into well-defined downward trends--particularly in the case of family expenditures (table 2). As the College data families experienced rising incomes over the period 1940-42 we see that expenditures for most consumer items did not increase in anything like the same proportion as income. The higher the new income position the smaller is the proportionate amount of income allocated to family living. In this respect these budgets behave in essentially the same way as the FSA budgets, only a bit more vigorously. In short, all the data available to this study are repetitious on this point--the amount of income expended for family living declines relative to a rise in disposable income.

Contrary to the behavior of FSA families the College data families tend to spend a smaller proportion of their income on capital goods upon arriving at a new and higher income position. Starting from the same 1940 income base, with few exceptions, each group who moved up into a higher income position by 1942 allocated a smaller proportion of their income to the purchase of capital goods. Although this downward trend in the proportion of income allocated to the purchase of capital goods is persistent, it is not nearly so steep as in the case of the category, Family Expenditures Adjusted. The income-elasticity of expenditure for capital goods is still much greater than that for family living. 10/

But why this difference in budgetary behavior between College data families and the FSA families? To advance a theory, given an increase in income, the rate of expenditure for capital goods is less rapid for the College families than the FSA families because the farmers represented by the College data, it will be remembered, are the settled group, who for the most part have spent years building up their investment and are now probably in the replacement phase

10/ These income-expenditure relationships may be seen in a different type classification in table 34 where the principal classifying item is size of income change.

Table 2.- Income-Outlay patterns expressed as a percentage of net family income when family budgets of the 1940 income class \$2,000-\$2,999 are distributed into 1942 income positions

College data

Budget Items	1942 budgetary data by income classes									
	Budgetary Data \$2,000: \$3,000: \$4,000: \$5,000: \$6,000: \$7,000: \$8,000	to :	to :	to :	to :	to :	to :	to :	to :	to
(Budget Frequency) 1/	97	8	17	19	16	13	6	10		
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures										
food	10.1	12.0	8.5	8.3	6.1	5.8	4.3	4.4		
clothing and personal	7.0	6.0	5.6	7.2	4.4	4.0	3.6	3.0		
household	11.1	10.6	8.0	6.6	8.5	6.8	5.4	3.5		
medical care	3.5	4.5	2.8	1.7	1.5	2.0	1.0	1.0		
other	16.4	12.4	12.6	14.8	10.1	13.0	3.5	14.1		
Family expenditures adjusted:	67.1	65.1	50.1	51.9	40.2	40.7	26.2	32.9		
Capital expenditures										
sale of capital goods	35.5	28.6	21.7	17.4	17.7	14.8	17.9	12.5		
livestock	- 8.9	-12.7	- 3.5	- 5.0	- 4.0	- 5.0	- 5.4	- 5.0		
land, building & improv.	8.9	9.0	8.5	5.4	7.5	3.5	7.0	6.7		
machinery, equip., other	10.8	4.9	5.5	7.1	4.6	7.7	6.6	1.7		
	24.7	27.4	11.2	9.9	9.6	8.6	9.7	9.1		

1/ Classes with a budget frequency of less than 6 are not shown.

of the investment cycle. Theirs are the well-equipped, well-built, well-stocked farms, whereas the FSA farms are early in the investment cycle and tend to be under-equipped, under-built, and under-stocked. If this brief analysis is correct, the divergence in budgetary behavior between the two groups with respect to capital goods makes sense; if it is not correct, the divergence is incongruous to say the least.

Marginal-Income Relationships.— The income-expenditure relationships observed in the previous section are accentuated at the margin (fig. 8). The FSA farm families, upon experiencing additions to income (marginal increments of income), make expenditures out of those additions to income in line with previous findings, but in a more pronounced, exaggerated manner (table 3). For example, expenditures summated in the category, Family Expenditures Adjusted, increase from only \$306 to \$562 as the marginal increments of income were increasing from \$250 to \$3,298—a clear demonstration of the slow rate of expenditure increase for family-living items associated with rising incomes. Stated somewhat differently, when we relate the category, Family Expenditures Adjusted, to the marginal increments of income the percentage contours decline from 122 percent at the \$250 income increment to 17 percent at the \$3,298 income increment.

Within the context of the category, Family Expenditures Adjusted, we observe that expenditures for the item "food" made out of the additions to income increase from \$76 to only \$87 as the marginal increments of income are increasing from \$250 to \$3,298—a rate of expenditure increase which is practically negligible. On the other hand, expenditures for the item "other" increase from \$27 to \$117 over the same range of income increments—a rate of increase considerably more rapid than they described for food. In sum, the behavior of the FSA families at the income margin is sharply pronounced, and explains in large measure the average behavior since the average behavior must follow the budgetary behavior at the margin.

Capital expenditures in contrast to consumer behavior increase from \$91 to \$814, as the additions to income are increasing from \$250 to \$3,298. After the first marginal-income class is past, the rate of increase in expenditures for capital goods is roughly proportionate to the rate of increase in additions to income. And the largest single item listed under Capital Expenditures, "machinery, equipment, and other", after the first marginal income class is past achieves a rate of expenditure increase slightly more rapid than the rate of increase in the size of the marginal income increments.

EXPENDITURES MADE OUT OF ADDITIONS TO INCOME, EXPRESSED AS A PERCENTAGE OF THE ADDITIONS TO INCOME, FSA DATA

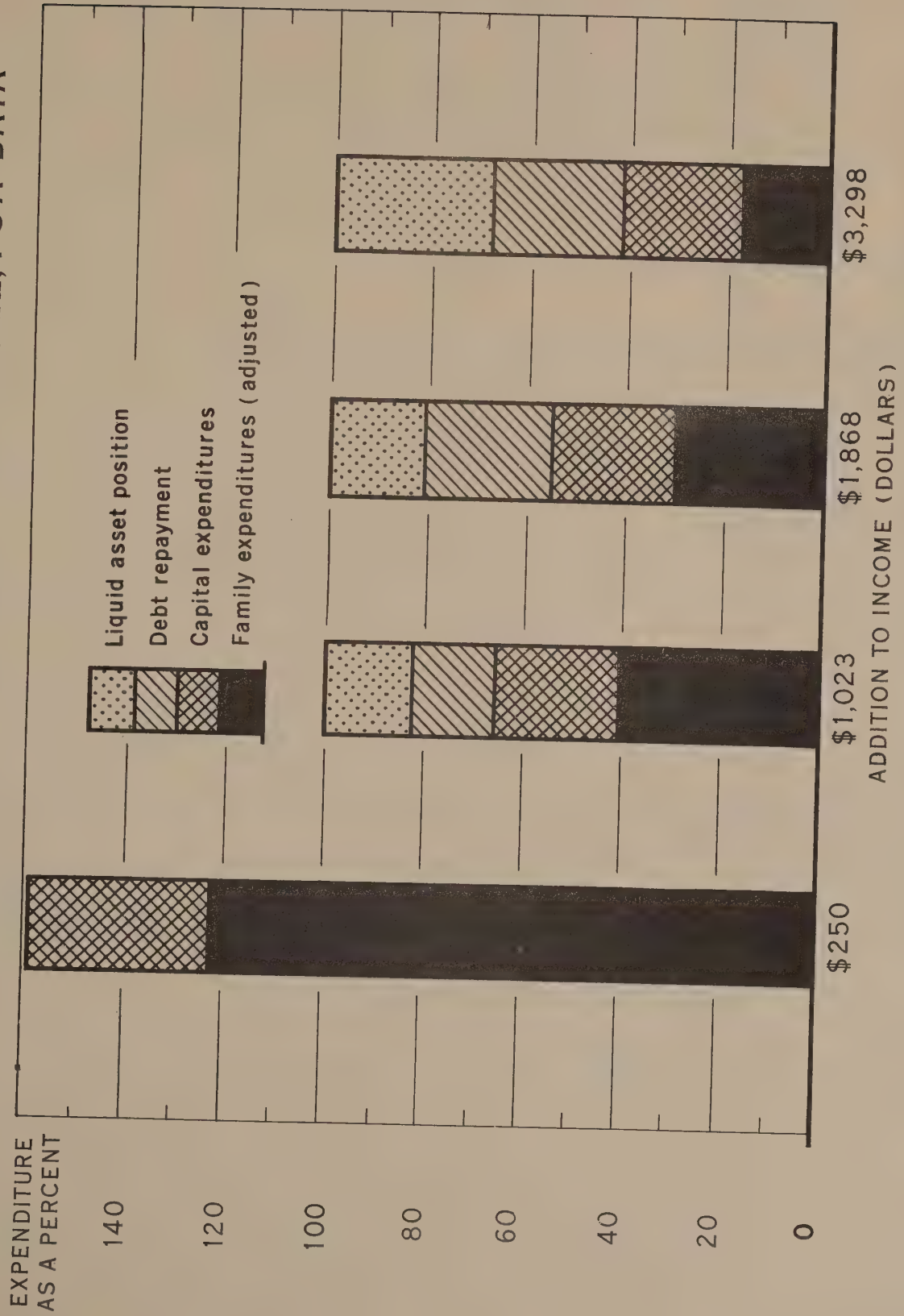


Table 3.- Expenditures made out of additions to income between 1940 and 1942, classified by size of income addition and base income position 1/ FSA data

Budget Items	2/	3/	4/	5/	6/	7/	8/	9/	10/	11/	12/	13/	14/	15/	16/	17/	18/	19/	20/	21/	22/	23/	24/	25/	26/	27/	28/	29/	30/	31/	32/	33/	34/	35/	36/	37/	38/	39/	40/	41/	42/	43/	44/	45/	46/	47/	48/	49/	50/	51/	52/	53/	54/	55/	56/	57/	58/	59/	60/	61/	62/	63/	64/	65/	66/	67/	68/	69/	70/	71/	72/	73/	74/	75/	76/	77/	78/	79/	80/	81/	82/	83/	84/	85/	86/	87/	88/	89/	90/	91/	92/	93/	94/	95/	96/	97/	98/	99/	100/	101/	102/	103/	104/	105/	106/	107/	108/	109/	110/	111/	112/	113/	114/	115/	116/	117/	118/	119/	120/	121/	122/	123/	124/	125/	126/	127/	128/	129/	130/	131/	132/	133/	134/	135/	136/	137/	138/	139/	140/	141/	142/	143/	144/	145/	146/	147/	148/	149/	150/	151/	152/	153/	154/	155/	156/	157/	158/	159/	160/	161/	162/	163/	164/	165/	166/	167/	168/	169/	170/	171/	172/	173/	174/	175/	176/	177/	178/	179/	180/	181/	182/	183/	184/	185/	186/	187/	188/	189/	190/	191/	192/	193/	194/	195/	196/	197/	198/	199/	200/	201/	202/	203/	204/	205/	206/	207/	208/	209/	210/	211/	212/	213/	214/	215/	216/	217/	218/	219/	220/	221/	222/	223/	224/	225/	226/	227/	228/	229/	230/	231/	232/	233/	234/	235/	236/	237/	238/	239/	240/	241/	242/	243/	244/	245/	246/	247/	248/	249/	250/	251/	252/	253/	254/	255/	256/	257/	258/	259/	260/	261/	262/	263/	264/	265/	266/	267/	268/	269/	270/	271/	272/	273/	274/	275/	276/	277/	278/	279/	280/	281/	282/	283/	284/	285/	286/	287/	288/	289/	290/	291/	292/	293/	294/	295/	296/	297/	298/	299/	300/	301/	302/	303/	304/	305/	306/	307/	308/	309/	310/	311/	312/	313/	314/	315/	316/	317/	318/	319/	320/	321/	322/	323/	324/	325/	326/	327/	328/	329/	330/	331/	332/	333/	334/	335/	336/	337/	338/	339/	340/	341/	342/	343/	344/	345/	346/	347/	348/	349/	350/	351/	352/	353/	354/	355/	356/	357/	358/	359/	360/	361/	362/	363/	364/	365/	366/	367/	368/	369/	370/	371/	372/	373/	374/	375/	376/	377/	378/	379/	380/	381/	382/	383/	384/	385/	386/	387/	388/	389/	390/	391/	392/	393/	394/	395/	396/	397/	398/	399/	400/	401/	402/	403/	404/	405/	406/	407/	408/	409/	410/	411/	412/	413/	414/	415/	416/	417/	418/	419/	420/	421/	422/	423/	424/	425/	426/	427/	428/	429/	430/	431/	432/	433/	434/	435/	436/	437/	438/	439/	440/	441/	442/	443/	444/	445/	446/	447/	448/	449/	450/	451/	452/	453/	454/	455/	456/	457/	458/	459/	460/	461/	462/	463/	464/	465/	466/	467/	468/	469/	470/	471/	472/	473/	474/	475/	476/	477/	478/	479/	480/	481/	482/	483/	484/	485/	486/	487/	488/	489/	490/	491/	492/	493/	494/	495/	496/	497/	498/	499/	500/	501/	502/	503/	504/	505/	506/	507/	508/	509/	510/	511/	512/	513/	514/	515/	516/	517/	518/	519/	520/	521/	522/	523/	524/	525/	526/	527/	528/	529/	530/	531/	532/	533/	534/	535/	536/	537/	538/	539/	540/	541/	542/	543/	544/	545/	546/	547/	548/	549/	550/	551/	552/	553/	554/	555/	556/	557/	558/	559/	560/	561/	562/	563/	564/	565/	566/	567/	568/	569/	570/	571/	572/	573/	574/	575/	576/	577/	578/	579/	580/	581/	582/	583/	584/	585/	586/	587/	588/	589/	590/	591/	592/	593/	594/	595/	596/	597/	598/	599/	600/	601/	602/	603/	604/	605/	606/	607/	608/	609/	610/	611/	612/	613/	614/	615/	616/	617/	618/	619/	620/	621/	622/	623/	624/	625/	626/	627/	628/	629/	630/	631/	632/	633/	634/	635/	636/	637/	638/	639/	640/	641/	642/	643/	644/	645/	646/	647/	648/	649/	650/	651/	652/	653/	654/	655/	656/	657/	658/	659/	660/	661/	662/	663/	664/	665/	666/	667/	668/	669/	670/	671/	672/	673/	674/	675/	676/	677/	678/	679/	680/	681/	682/	683/	684/	685/	686/	687/	688/	689/	690/	691/	692/	693/	694/	695/	696/	697/	698/	699/	700/	701/	702/	703/	704/	705/	706/	707/	708/	709/	710/	711/	712/	713/	714/	715/	716/	717/	718/	719/	720/	721/	722/	723/	724/	725/	726/	727/	728/	729/	730/	731/	732/	733/	734/	735/	736/	737/	738/	739/	740/	741/	742/	743/	744/	745/	746/	747/	748/	749/	750/	751/	752/	753/	754/	755/	756/	757/	758/	759/	760/	761/	762/	763/	764/	765/	766/	767/	768/	769/	770/	771/	772/	773/	774/	775/	776/	777/	778/	779/	780/	781/	782/	783/	784/	785/	786/	787/	788/	789/	790/	791/	792/	793/	794/	795/	796/	797/	798/	799/	800/	801/	802/	803/	804/	805/	806/	807/	808/	809/	810/	811/	812/	813/	814/	815/	816/	817/	818/	819/	820/	821/	822/	823/	824/	825/	826/	827/	828/	829/	830/	831/	832/	833/	834/	835/	836/	837/	838/	839/	840/	841/	842/	843/	844/	845/	846/	847/	848/	849/	850/	851/	852/	853/	854/	855/	856/	857/	858/	859/	860/	861/	862/	863/	864/	865/	866/	867/	868/	869/	870/	871/	872/	873/	874/	875/	876/	877/	878/	879/	880/	881/	882/	883/	884/	885/	886/	887/	888/	889/	890/	891/	892/	893/	894/	895/	896/	897/	898/	899/	900/	901/	902/	903/	904/	905/	906/	907/	908/	909/	910/	911/	912/	913/	914/	915/	916/	917/	918/	919/	920/	921/	922/	923/	924/	925/	926/	927/	928/	929/	930/	931/	932/	933/	934/	935/	936/	937/	938/	939/	940/	941/	942/	943/	944/	945/	946/	947/	948/	949/	950/	951/	952/	953/	954/	955/	956/	957/	958/	959/	960/	961/	962/	963/	964/	965/	966/	967/	968/	969/	970/	971/	972/	973/	974/	975/	976/	977/	978/	979/	980/	981/	982/	983/	984/	985/	986/	987/	988/	989/	990/	991/	992/	993/	994/	995/	996/	997/	998/	999/	1000/	1001/	1002/	1003/	1004/	1005/	1006/	1007/	1008/	1009/	1010/	1011/	1012/	1013/	1014/	1015/	1016/	1017/	1018/	1019/	1020/	1021/	1022/	1023/	1024/	1025/	1026/	1027/	1028/	1029/	1030/	1031/	1032/	1033/	1034/	1035/	1036/	1037/	1038/	1039/	1040/	1041/	1042/	1043/	1044/	1045/	1046/	1047/	1048/	1049/	1050/	1051/	1052/	1053/	1054/	1055/	1056/	1057/	1058/	1059/	1060/	1061/	1062/	1063/	1064/	1065/	1066/	1067/	1068/	1069/	1070/	1071/	1072/	1073/	1074/	1075/	1076/	1077/	1078/	1079/	1080/	1081/	1082/	1083/	1084/	1085/	1086/	1087/	1088/	1089/	1090/	1091/	1092/	1093/	1094/	1095/	1096/	1097/	1098/	1099/	1100/	1101/	1102/	1103/	1104/	1105/	1106/	1107/	1108/	1109/	1110/	1111/	1112/	1113/	1114/	1115/	1116/	1117/	1118/	1119/	1120/	1121/	1122/	1123/	1124/	1125/	1126/	1127/	1128/	1129/	1130/	1131/	1132/	1133/	1134/	1135/	1136/	1137/	1138/	1139/	1140/	1141/	1142/	1143/	1144/	1145/	1146/	1147/	1148/	1149/	1150/	1151/	1152/	1153/	1154/	1155/	1156/	1157/	1158/	1159/	1160/	1161/	1162/	1163/	1164/	1165/	1166/	1167/	1168/	1169/	1170/	1171/	1172/	1173/	1174/	1175/	1176/	1177/	1178/	1179/	1180/	1181/	1182/	1183/	1184/	1185/	1186/	1187/	1188/	1189/	1190/	1191/	1192/	1193/	1194/	1195/	1196/	1197/	1198/	1199/	1200/	1201/	1202/	1203/	1204/	1205/	1206/	1207/	1208/	1209/	1210/	1211/	1212/	1213/	1214/	1215/	1216/	1217/	1218/	1219/	1220/	1221/	1222/	1223/	1224/	1225/	1226/	1227/	1228/	1229/	1230/	1231/	1232/	1233/	1234/	1235/	1236/	1237/	1238/	1239/	1240/	1241/	1242/	1243/	1244/	1245/	1246/	1247/	1248/	1249/	1250/	1251/	1252/	1253/	1254/	1255/	1256/	1257/	1258/	1259/	1260/	1261/	1262/	1263/	1264/	1265/	1266/	1267/	1268/	1269/	1270/	1271/	1272/	1273/	1274/	1275/	1276/	1277/	1278/	1279/	1280/	1281/	1282/	1283/	1284/	1285/	1286/	1287/	1288/	1289/	1290/	1291/	1292/	1293/	1294/	1295/	1296/	1297/	1298/	1299/	1300/	1301/	1302/	1303/	1304/	1305/	1306/	1307/	1308/	1309/	1310/	1311/	1312/	1313/	1314/	1315/	1316/	1317/	1318/	1319/	1320/	1321/	1322/	1323/	1324/	1325/	1326/	1327/	1328/	1329/	1330/	1331/	1332/	1333/	1334/</
--------------	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	---------

The category, Debt Repayment, expands in a rapid fashion as the marginal increments of income increase in size. The rate of outlay associated with increasing marginal increments of income for Debt Repayment is more rapid than the rate of income increase itself. Summating the principal categories of outlay we observe that the total outlay made from additions to income does not keep pace with the additions to income. The Liquid Asset Position of FSA families improves at a rapid pace as the marginal income increments increase in size. For example, the Liquid Asset Position--or cash on hand--increases from a \$-43 to \$1,031 as the income increments increase from \$250 to \$3,298. In other words, at the income margin the FSA families are in large measure using the additions to income to pay off old debts and build up their Liquid Asset Position.

The picture at the income margin when we turn to the College data is remarkably similar to the statistical description of the FSA data (table 4). The same sharply accentuated income-expenditure relationships evidence themselves at the income margin for the College data that we observed in the FSA data. The families here represented increase their expenditures for family living out of the additions to income at a very slow rate. When the marginal increments of income are increasing from \$237 to \$6,307--an increase of 27 times--the category, Family Expenditures Adjusted, increases from \$354 to only \$439--not even double. On the other hand, the category, Capital Expenditures, expands rapidly as the size of the income increments expand, although the rate of expenditure increase is not particularly consistent.

The allocation of income at the margin, when equal-sized marginal increments of income are applied to different base-income positions, provides a different slant to this marginal analysis (fig. 9). From the preceding descriptive analysis, it would seem logical to expect typical FSA families at the 0-\$999 income level to make a greater dollar expenditure for family living out of, say, a \$1,000 income increase, than typical families at the \$2,000-\$2,999 income level. But the data do not bear out this hypothesis. The FSA families make a greater expenditure for family living out of a constant marginal increment of income at the \$3,000-\$3,999 income class than they do at the 0-\$999 income class (table 37).

Given a flat income increase approximating \$1,000 (the mid point of the size of income-change class \$500-\$1,499) between 1940 and 1942 we see that the dollar expenditure for family living increases \$376 for the original 0-\$999 income class, \$416 for the original \$1,000-\$1,999 class, \$472 for the original \$2,000-\$2,999 class, and \$604 for the original \$3,000-\$3,999 class. But the rate of expenditure increase is much more rapid for capital goods than it is for consumer goods and services. For example, the expenditure increase, given a flat addition to income approximating \$1,000 over the four income classes just enumerated, runs as follows: \$-27, \$257, \$302, and \$518. With this rapid rise in expenditures for capital goods, however, the amount allocated to Debt Repayment might be construed to be declining slightly although the trend line

Table 4.- Expenditures made out of additions to income between 1940 and 1942, classified by size of income addition and base income position 1/ College data

Budget Items	Additions to a 1940 base income of \$1,000-\$1,999			
(Budget Frequency) 2/	\$237	\$1,100	\$2,134	\$6,307
Family expenditures	10	14	15	50
food				
clothing and personal	77	88	88	78
household	41	75	68	63
medical care	95	87	116	130
other	30	28	40	36
Family expenditures adjusted	15	144	70	9
	354	514	547	439
Capital expenditures				
sale of capital goods	-181	-39	740	605
livestock	19	94	19	107
land, building & improvement	-96	-11	246	184
machinery, equipment, other	62	34	116	114
	-128	32	397	414

1/ Expenditure data at the income margin may be seen for more classifications in table 35.
 2/ Classes with a budget frequency of less than 6 are not shown.

**EXPENDITURES MADE OUT OF A FLAT ADDITION TO INCOME OF \$1,000,
WHEN THE BASE INCOME POSITION IS CHANGING, FSA DATA**

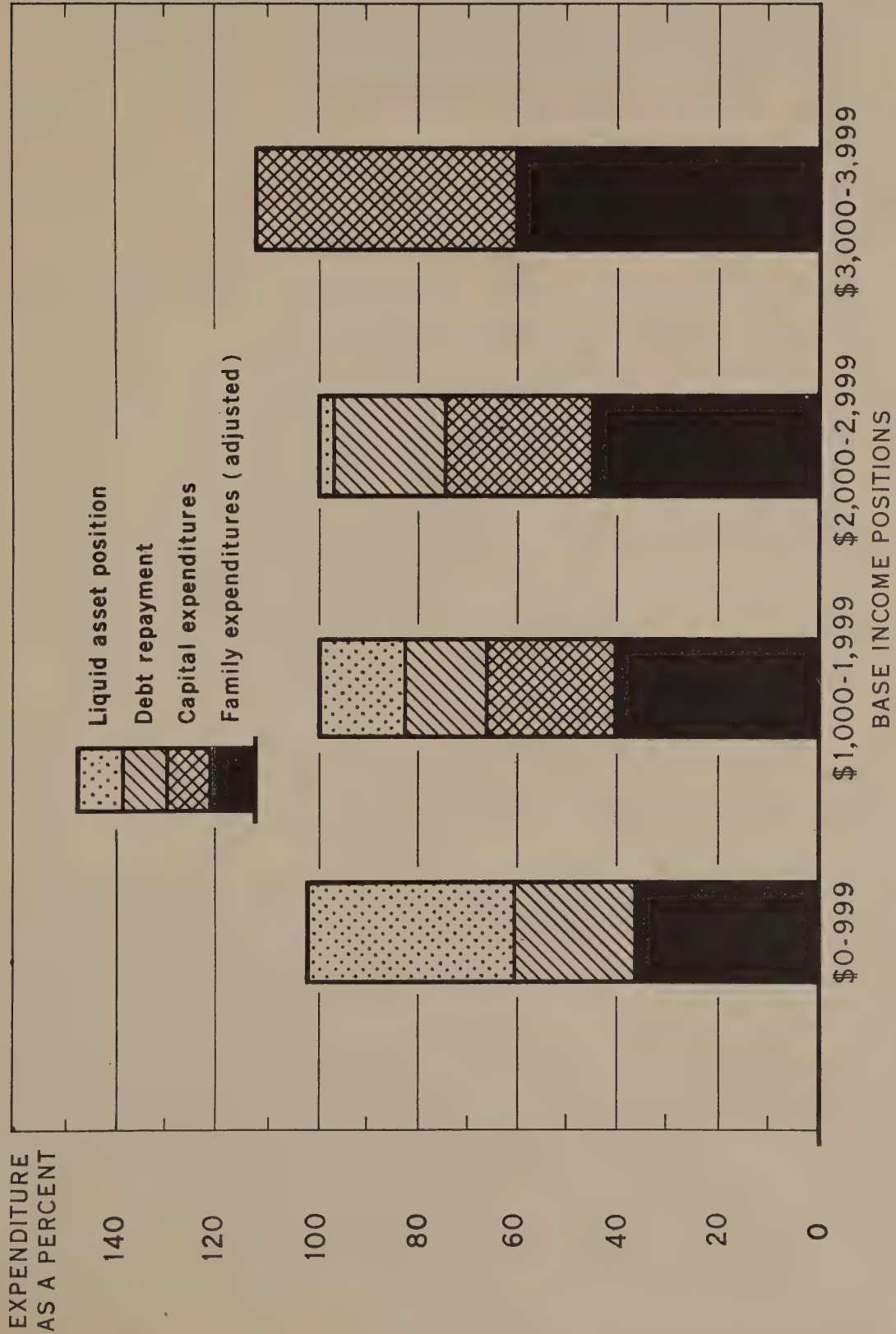


FIGURE 9

is highly erratic. Nevertheless, total outlay displays a clear-cut tendency to take up a larger proportion of any equal increase in income, the larger the original unit of income to which the increase is added. 11/

But as the size of the flat income increase is stepped up, say to \$2,000 (the mid point of the size of income change class \$1,500-\$2,499), the significance of the base-income position recedes. Contrary to the description above, farm families whose incomes in 1940 fell within the \$3,000-\$3,999 class made expenditures for family living and capital goods out of an income increase of \$2,000 only slightly greater in magnitude than did families with a similar income increase whose 1940 income fell within the \$1,000-\$1,999 class.

If we should look at the percentage allocation of total net family income as between categories and items of expenditure, given a flat income addition over the range of income classes, the relationships so recently isolated at the margin no longer appear to hold (table 39). In other words, instead of looking at differences in expenditure between the 1940 and 1942 budgets--or the marginal expenditures--if we look at the average 1942 budget percentagewise we immediately rediscover the tendency for consumer items to receive a smaller proportion of total disposable income as we ascend the income scale--a scale which has been raised equally at each income class by a flat addition to income. On the other hand, the proportion of total disposable income allocated to the purchase of capital goods and services tends to increase with each higher income class--and debt repayment remains almost constant.

But these income-expenditure relationships do not contradict the marginal relationships; they are simply the product of a different technique of measurement. The expenditure made out of a flat marginal increment of income can be rising for each ascending

11/ The substantial improvement in the Liquid Asset Position in the Income Class \$0-\$999 in the first classification of table 37 is to some degree illusory. In the 1942 average budget a negative amount of \$170 shows up in the Liquid Asset Position, but for the same group of families in 1940 a negative amount of \$616 shows up in the Liquid Asset Position. An improvement of \$446 took place between 1940 and 1942; the exact amount indicated at the margin in table 37. Hence, it must be concluded that the improvement in the Liquid Asset Position at the margin is used to obtain a greater equity in goods and services, both consumer and capital, purchased within the year 1942. In other words, the families in the lower income classes are not using the additions to income to increase their levels of living, but rather are using the increases to pay for the goods and services that they were already buying through the extension of credit.

base-income position and remain in harmony with a declining proportion of total expenditure to total income, provided the marginal expenditure is sufficiently small, which is exactly the case with respect to family expenditures adjusted in the first classification in table 37. But when the marginal expenditure grows as it does in the second classification in table 37, the rate of expenditure increase slows down almost to a constant in order to remain in harmony with the declining proportion of total family expenditure to total net family income. In short, action at the margin leads or influences total action, but very often that action is not of sufficient magnitude to be controlling at the movement.

A review of budgetary behavior at the margin for the College-data families, where family groups originating at different 1940 base income positions receive additions to income of equal size between 1940 and 1942, should provide some checks to the findings of the FSA section (table 38). Expenditures for family living made out of marginal income increments decline for each higher base-income position, when each higher base-income position is in receipt of an income increment of equal size. In other words, the College-data families in higher income brackets spend fewer actual dollars for family living out of a given addition to income than do College-data families in the lower income classes. This tendency breaks down at the extremes, but within the range of income where the bulk of the College budgets fall the tendency is pronounced. In broad outline, this tendency runs counter to the findings of the FSA section but it will be remembered that the FSA families, who received an income addition approximating \$2,000, evidenced only a slight tendency to make a greater expenditure for family living out of that addition at high base-income positions than at low base-income positions.

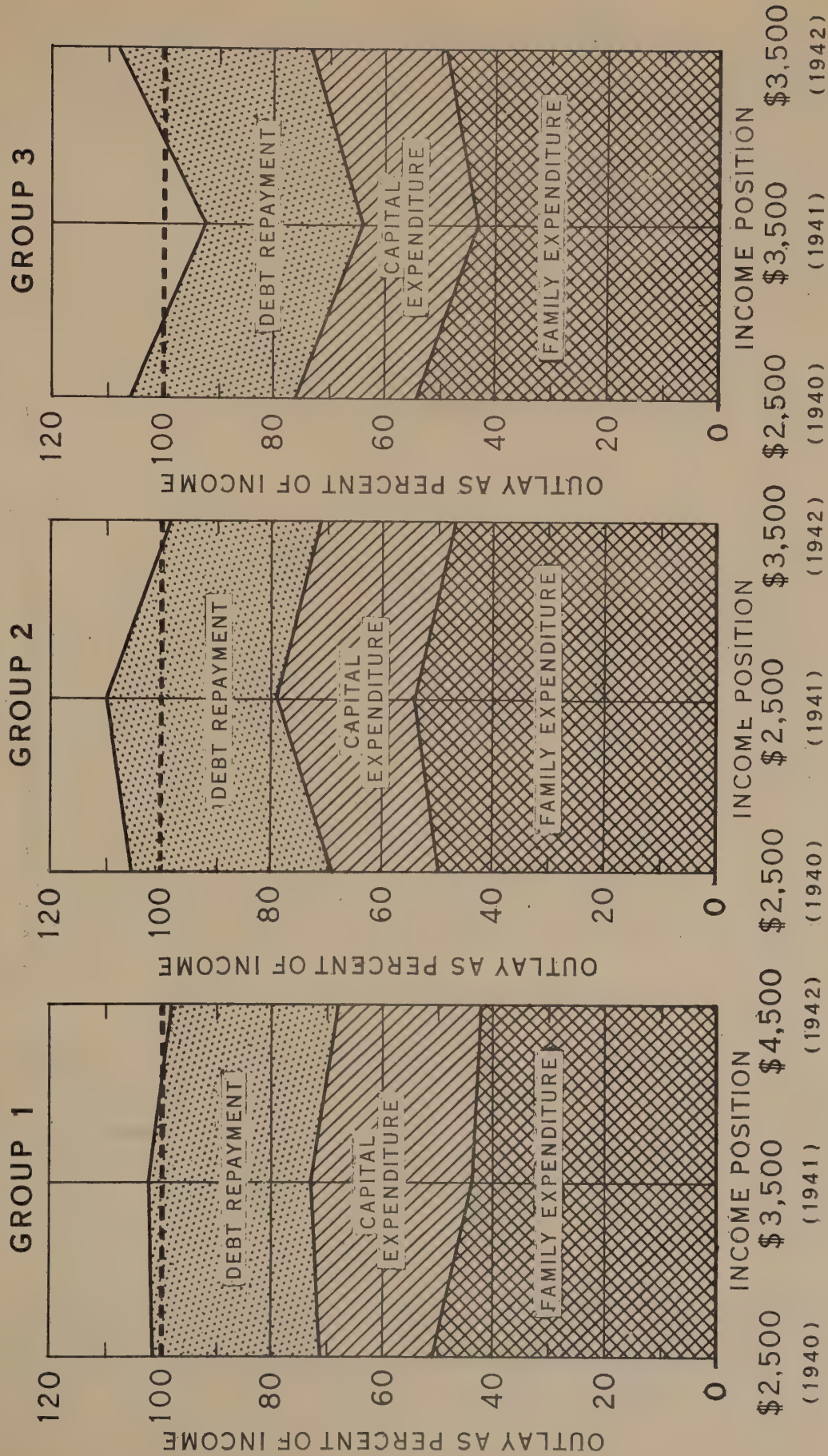
Considering the principal findings of this study the tendency for fewer actual dollars to be spent out of an additional increment of income for family living at each higher base-income position seems logical. And the failure for such a force to operate, as in the case of the FSA family budgets, seems inconsistent with the pronounced tendency for smaller proportions of total income to be allocated to family living at higher levels of income. But the fact that the number of dollars spent for family living at the margin are increasing for the FSA families and decreasing for the College families is not necessarily inconsistent (compare table 37 with table 38). It means only that the decline in the proportion of total income allocated to family living, assuming net family incomes to be ascending, must be more rapid for the College-data families than for the FSA families, and this is the case.

Time and Income Variations.-- The effect of time or period of income change upon the composition of family budgets has been the subject of considerable speculation. It can scarcely be doubted that the time sequence of an income change is an important factor in the current allocation of disposable income. But the data available to this study are too skimpy--there are too few sequences with too few observations in each sequence over a sufficient period of time--to permit a definitive statement concerning the influence of time of income change on current budget composition. Ignoring the problem of time lags for the moment, let us look at the changing pattern of outlay by major categories for the FSA families over the 3-year period 1940, 1941, and 1942 (fig. 10). Income-outlay patterns for three groups of farm families are shown there; although the groups differ with respect to the income route taken between 1940 and 1942, the families within each group experienced the same income variations over the period.

It will be observed that the percentage of income allocated to the category Family Expenditures Adjusted declines over the 3-year period for group 1, the families of which moved up one income class each year during the period. Concurrent with this downward movement in the percentage trend line of family expenditures, the percentage area for Capital Expenditures expands, even if not in a smooth, clear movement. And Debt Repayment holds almost constant over the 3-year period. On balance then, the percentage of total income expended declines from slightly over 100 percent in 1940 to slightly under 100 percent in 1942 (the absolute values, also greater detail, may be seen in table 41).

For the families in group 2, who experienced no income change between 1940 and 1941, and then moved up one income class in 1942, the percentage of income allocated to family living rises between 1940 and 1941 and falls between 1941 and 1942; the percentage of income allocated to the purchase of capital goods also rises between 1940 and 1941 and falls between 1941 and 1942, although not to the 1940 level; and the percentage of income allocated to the payment of old debts declines moderately over the entire period. In total then, income-outlays exceed 100 percent in 1940, rise substantially between 1940 and 1941, and finally fall between 1941 and 1942 to something slightly under 100 percent. In the case of families falling in group 3--those whose incomes increased approximately \$1,000 between 1940 and 1941 and then remained constant at the new level between 1941 and 1942--the income-outlay patterns are the inverse of those described for group 2. But as the income sequence has changed, the changed outlay patterns are entirely logical.

SHIFTS IN INCOME-OUTLAY PATTERNS ASSOCIATED WITH CHANGES IN INCOME, FOR SELECTED FAMILY GROUPS, 1940, 1941, AND 1942, FSA DATA



U. S. DEPARTMENT OF AGRICULTURE

NEG. 45962

BUREAU OF AGRICULTURAL ECONOMICS

Figure 10

* Plotted data derived from table 41.

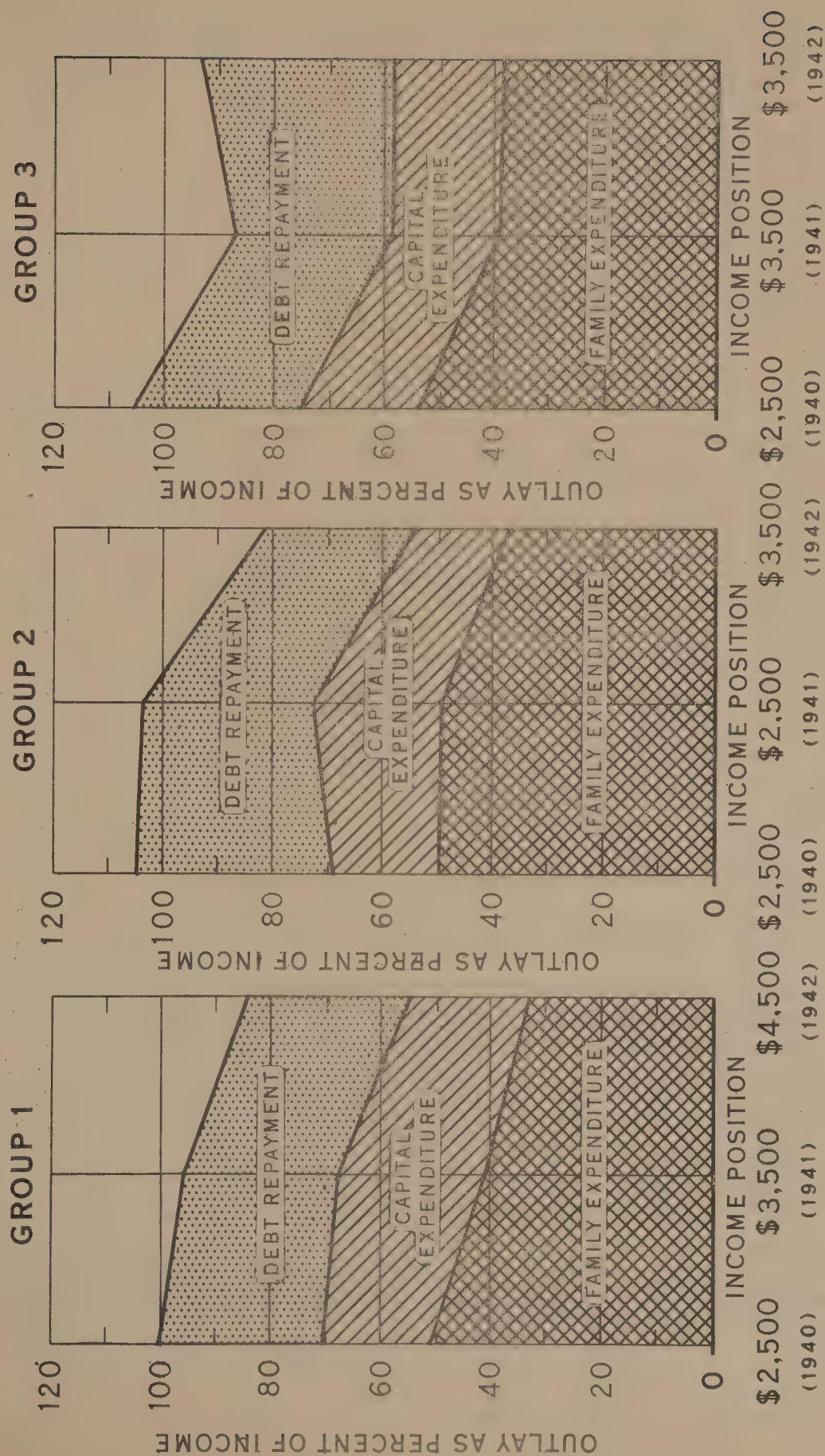
It seems clear that whenever these families experience a rise in income the allocation of income for family living declines on a percentage basis. Thus, once again, in a slightly different presentation, we observe the economic tendency for the proportion of income allocated to family living to decline as incomes rise, and the complementary tendency for income-outlays for capital goods and debt repayment to increase at a rate at least proportionate to the rate of income increase, and in numerous cases at a more rapid rate. It would appear also that whenever the FSA families have 2 years to adjust to a new and higher income position, the proportion of income allocated to family expenditures expands in the second year. Comparing family group 2 with group 3, there is some evidence to show that total expenditures for consumer goods and services as well as total outlay are larger percentagewise for those families who had 2 years to adjust to an increased income position than for those families who had only one year.

It will be remembered, however, that the period 1940-42 was one of rising prices. And it is reasonable to speculate for those cases where incomes remained constant over a 2-year period as to whether the rise in expenditures for family living was due to an actual increase in consumption or to a rise in prices. To provide at least a partial answer to this question the income-outlays of FSA families are deflated ^{12/} in the case of Family Expenditures Adjusted and Capital Expenditures and related to an undeflated income (fig. 11). The increases in Family Expenditures Adjusted, when income is held constant over a 2-year period (groups 2 and 3, fig. 10) are converted into modest decreases in figure 11. This would seem to indicate that the expenditure increases for family living shown in groups 2 and 3 of figure 10 were due to price increases and not to budget reorganization. It may well be that a 2-year period of adjustment is too short a period in which to achieve a significant budget reorganization. On the other hand apparently some budget reorganization did take place in the 2-year period of adjustment and the increases went either into Capital Expenditures or Debt Repayment.

To sum up then, the category Family Expenditures Adjusted seems immensely stable over a 3-year period. When incomes increase, the associated expenditure increase for family living is slight, and the percentage allocation in the total budget declines immediately and significantly. On the other hand, when incomes hold constant, even immediately following an income increase, the percentage allocation for family living fails to rise. Family living shows up to be the inflexible component in the total budget.

^{12/} The family expenditure data were deflated by an index of cost of living as follows: 1940 = 100, 1941 = 108, 1942 = 127; and the Capital Expenditure by an index of production costs as follows: 1940 = 100, 1941 = 108, 1942 = 120.

SHIFTS IN PRICE DEFLATED OUTLAY PATTERNS ASSOCIATED WITH CHANGES IN INCOME, FOR SELECTED FAMILY GROUPS, 1940, 1941, AND 1942, FSA DATA



U.S. DEPARTMENT OF AGRICULTURE

NEG. 46169

BUREAU OF AGRICULTURAL ECONOMICS

Figure 11

* Plotted data derived from table 41.

Another way of looking at the changing composition of family budgets is provided when the family budgets falling within the same 1942 income classes are arranged in subclasses according to their 1940 income positions (table 42). By this scheme of classification we can see how family budgets that fall within the same 1942 income class differ because they originated at different income positions in 1940. In short, we can appraise the effect of the magnitude of income change upon the composition of family budgets over a 2-year period. Families who received very low incomes in 1940 (\$0-\$999) when they experienced an income increase that moved them to the \$2,000-\$2,999 income class in 1942 jumped their total outlay upward radically--particularly the categories, Capital Expenditures and Debt Repayment. And the categories, Capital Expenditures and Debt Repayment do not behave in a consistent fashion in any of the classifications.

But aside from these exceptions we find a tendency among these data for the category, Family Expenditures Adjusted, and most items comprising it to fall short of the "typical 1942 pattern" to a greater degree, the greater the magnitude of income change between 1940 and 1942. That is, a group of families receiving incomes falling within the class \$1,000-\$1,999 in 1940 upon finding themselves in the income class \$3,000-\$3,999 in 1942 raise their pattern of outlay for family living, but not to the level of those families who remained in the \$3,000-\$3,999 class from 1940 to 1942. Meanwhile, a group of families receiving incomes falling within the class \$2,000-\$2,999 in 1940 upon finding themselves in the income class \$3,000-\$3,999 in 1942 raise their pattern of outlay for family living slightly more than the group starting at \$1,000-\$1,999 but not quite to the level of the group that experienced no change in income. This relationship is not crystal clear, but with a certain degree of smoothing of the data it seems reasonable to conclude that the greater the income change, say increase, the greater the time lag involved in raising the pattern of expenditure to the class norm, particularly for the consumer portion of the expenditure pattern.

Household-Size Considerations.-- The second independent variable which we correlate with the pattern of income-outlay is household size--number of persons in the household. The original plan was to hold income and its effects constant in this phase of the analysis so as to evaluate more accurately the changing composition of family budgets associated with changes in the number of persons in the household. This plan had to be modified radically when it was discovered that the cells within the scheme of classification multiplied to the point, over the 3-year period, where rarely more than one or two budget cases would fall in a single cell in the final classification. Hence, three compromised schemes of classifying the budget data are employed to show the relation of change in the number of persons in the household to budget composition none of which are really satisfactory, principally because income forces are not excluded from the analysis.

In the first procedure the FSA budgetary data are classified by size of change in income and by change in household size between 1940 and 1942, regardless of the original income position and original household size. The absolute data are practically meaningless--families with incomes of \$1,500 are thrown together with families with incomes of \$5,000 in 1940, and two-member families are thrown in with seven-member families, etc.--but as indices of change the data do possess meaning, and when the categories of outlay are converted into percentages of net family income (as in table 43) the indices are placed on a comparable basis. For the first income-change control class, \$500-\$1,499, meaningful relationships of changes in household size to income-outlay emerge. Expenditures for all items of family living except "other" increase with some consistency as the change in family size yields a larger household (for example, from - 2 to a + 2 members). Such an upward trend in family-living expenditures associated with a net increase in the size of household is certainly in line with what might be expected. But this observable trend in family-living expenditures breaks down in the income-change control class \$1,500-\$2,499. Here expenditures move up and down in a haphazard fashion and refuse to fall into consistent relationships. For these seemingly inconsistent income-expenditure relationships we have no explanation. Our best guess is that the data on size of household are not particularly good. But it may be that other determinants of income-allocation not considered in this study are at work here, and are more significant than the one under consideration. 13/

It would not seem that changes in size of household would be related to the other categories of outlay, except perhaps indirectly, as increases in expenditures for family living might force a curtailment in the amount of income allocated for Capital Expenditures and Debt Repayment. To some extent the data bear out this hypothesis. Expenditures for capital goods and the payment of old debts in both income-change control classes are erratic; nevertheless, in the size of income-change class \$500-\$1,499 where consistent trends were isolated with regard to family-living expenditures, it will be observed that a downward trend in the proportion of income allocated to the purchase of capital goods is associated with net increases in the size of household if the first group - 2 members is ignored. In short, these data show glimmerings of consistent, meaningful relationships, but they cannot be used to nail down any hypothesis regarding the effect of change in the number of persons in the household upon the allocation of disposable income.

In the second procedure, major categories of outlay are classified by size of household in 1940 and size of household change

13/ If more time could have been spent in the collection phase of this study to obtain the age of each member of the household and family status, it seems probable that this household size analysis would have yielded more meaningful results.

between 1940 and 1942 with complete disregard to income-influencing factors (table 44). There does not seem to be any tendency for the category, Family Expenditures Adjusted, to increase with an increase in the size of household, or to decrease with a decrease in the size of household. And as there is no observable correlation of family expenditure to change in household size, it does not come as a surprise to discover that no correlation of Capital Expenditures or Debt Repayment to change in household size evidences itself. This failure to isolate a meaningful relationship between change in household size and the pattern of outlay is disappointing, for there is reason to believe that a consistent relationship does exist between these two variables

In the third procedure, the behavior of FSA families with respect to the allocation of income as affected by a change in the number of persons in the household is examined at the income margin (table 45). This approach would seem to be the most meaningful of the three pursued. It will be observed that expenditures made for family living out of the additions to income between 1940 and 1942 increase in a rough but clear-cut trend line as the change in household size increases from - 2 to + 2 members. And this upward trend in expenditures associated with additions to the family groups holds with some precision for the three items, "food", "clothing and personal", and "household". The trend in Capital Expenditures moves upward with net increase in the size of household, and more steeply so than the family-expenditures category. And as the outlay for Debt Repayment made out of the marginal increment of income remains nearly constant across the range of change in household-size classes, total outlay at the margin increases rather rapidly as we move from - 2 to + 2 members. In short, there would seem to be a pronounced tendency for Total Outlay--hence, most of the components of the total--to increase in dollar amount as we add persons to the household in the marginal analysis.

Relationships of family expenditure to household size probably stand out more clearly at the income margin than they do in the average analysis, because at the margin the families come into possession of new, uncommitted income which they are free to use as the circumstances of the current situation dictate. For example, one circumstance might be that another person joins the household so a portion of the added income is used to provide for the living of that person. If further this new person is free to work on the farm, or if this person frees someone in the house to work on the farm, a portion of the added income might be used to buy additional machinery to complement the added worker.

In other words, the farm family is probably more free to use an additional increment of income to meet a new need than it is to reorganize the base income completely. Hence, we get a better correlation of expenditures to changes in family size at the income margin because a change in family size represents a change in need.

In concluding this discussion of the relations of expenditures to changes in household size three points may be mentioned: (1) the data are not conclusive so we still know very little concerning the effect of a change in household size on the pattern of expenditure; (2) there is some evidence that family expenditures and most items that comprise the total do increase directly with a net increase in the number of persons in the household; and (3) at the income margin it is clear that expenditures for both family living and capital goods increase directly with a net increase in the size of household.

FAMILY LIVING AND THE FARM ENTERPRISE

It should be fruitful at this point to evaluate certain of the results of the preceding analysis, and given economic meaning to an otherwise statistical account. Reviewing the budgetary behavior of the 1,009 farm families included in this study there would appear to be two functional components of Total Outlay: (1) Family Expenditures Adjusted, which tends to be fixed or rigid, and (2) Capital Expenditures plus Debt Repayment, the aggregate of which tends to be flexible as do each of the two parts.

The category, Family Expenditures Adjusted, which is the total of individual lines of family expenditure plus the value of goods and services produced on the farm is exceedingly stable through time. It is true, given an increase in income, that farm families do increase their expenditures for consumer goods and services, but for each consumer line excepting "other" the absolute increase is small; hence, the family-living component shifts only modestly with changes in income. This stability is further accented by the inclusion of home-produced goods and services in the total, Family Expenditures Adjusted, which bear little relation to changes in income. The real value of home-produced food and house rent are almost constants in the budget, and act as an effective drag to the total. ^{14/} Thus, the family-living component of the expenditure side of the budget may be said to be unresponsive to income changes.

Expenditures made to retire debt and to purchase capital goods may be said to be the flexible component on the expenditure side of the budget. This component is highly responsive to income changes, increasing and decreasing directly with incomes. Further, the two principal items, Capital Expenditures and Debt Repayment, would seem to act in concert. Given an increase in income sufficiently large, both may expand to employ that increase. on the other hand, it may happen that either Capital Expenditures or Debt Repayment will expand more than in proportion to the income increase, and the expansion of one of the two parts comes at the expense of the other. This, then, would appear to be the operational behavior of the farm-family budgets--particularly the FSA family budgets--in the dynamic scene.

We are now in a position to advance our hypothesis that family living constitutes one of the "fixed costs", or perhaps the principal fixed cost, of the farm enterprise, whereas the

^{14/} The value of home-produced food may shift radically because of price changes, but price changes strike across the board, hence, do not affect relative positions.

allocation of income for the payment of old debts and the purchase of new capital goods may be viewed as a "residual cost".^{15/} We do not have the functional separation of (1) the disposal of income by the family, and (2) the acquisition of the income for the family, among farm people that we have for urban people. The business of living--the disposal of income--is inextricably bound up with the business of earning a living--the acquisition of income--for farm families. The farm, as a going concern, ceases to be when the farm family ceases to be, and obviously the farm family must make expenditures to live. And when we find, as we have in these data, that the elasticities of expenditure for consumer goods and services are extremely inelastic--that is, unresponsive to changes in income--then we must conclude that expenditures for family living are practically constant in the short run, and hence take the form of fixed costs. Expenditures for family living are a fixed cost that must be met to keep the farm plant operating whether or not the income is forthcoming to meet the needs of the total farm budget.

The expenditures for capital goods and for the payment of old debts may be termed residual costs because they are made, if income permits, after operating costs and fixed family costs have been met. In the 3-year period under consideration, farm incomes were increasing over the period; hence, a growing residual of income was available each year for the acquisition of capital goods and the repayment of debts. But if the expenditure trends isolated in this analysis are reversible we might logically expect, given persistent decreases in income, that expenditures for capital goods and debt repayment would dry up as the income residual dried up; and that fixed family costs would be met out of negative savings, provided either from commercial credit or from stored purchasing power.

Although it has been noted in the preceding analysis that the total spending function declines as net family incomes increase, it should also be noted that this decline is gradual. And over the significant range of income, total spending approximates total

^{15/} It is true that this conclusion coincides with the loan policy of the FSA under the variable-payment plan; hence, it might be held that the FSA loan policy dictates to a large degree the above conclusion. On the other side of the argument, the FSA does not force their clients to make variable payments even though the plan permits it, and if the tenant-purchase clients want to stick to some fixed-payment plan with respect to debt repayment they may do so. Further, the variable-payment plan was developed in the first place to fit the peculiar financial needs of farm operators. Thus, we may also argue, and logically, that the FSA loan policy is not cause, but rather effect.

disposable income, therefore little in the way of liquid savings accrue for investment outside the enterprise. The savings such as accrue to urban consumer units are used up among the farm families in expenditure for capital goods. The decision to save and the decision to invest are made by one or the same person or family among the farm people, whereas those decisions are made largely by separate decision-making units on the urban side of the economy. In short, we find only a minute portion of farm income held in the form of liquid assets, which could be hoarded and thus removed from the income stream. The bulk of farm savings are immediately reinvested in capital goods for the farm enterprise so there is no discontinuity in the process of saving and investing.

The implications to the national economy of the above observations, of course, depend upon the size of farm segment involved. But assuming that these observations hold for all Corn Belt farmers, which is an important segment in the circular flow of income, then we may say that the family-living component of the expenditure side of the farm-family budgets acts as a stabilizing force, and the component made up of expenditures for capital goods and the repayment of old debts as an explosive force in the operating economy. When net family incomes are rising and a residual of income remains after the fixed expenditures for family living are met, that income according to our thesis is allocated in large measure to the purchase of capital goods, which in turn increases the productiveness of the national farm plan (as well as raises the prices of things farmers buy) and so helps support an upswing in business activity. On the other hand, given a situation where net family incomes are declining, the income residual in individual farm budgets which could be used to purchase capital goods would also be declining. Hence, the contracting income residuals act as a deflationary force, reducing the effective demand for capital goods.

The role of Debt Repayment in the "residual cost" framework just propounded is not so clear. First, as a practical reason, the data on Debt Repayment were not available for the families covered by the College data, hence we have no picture of their budgetary behavior with respect to this category, and in turn we have no check on the FSA budgetary behavior. Second, as a theoretical reason, we do not know what the lending agencies may do with the funds repaid to them. If, for example, in a situation of rising incomes--a situation in which residual incomes are expanding--farm families step up their rate of Debt Repayment and the lending agencies impound those (or some part of those) payments, such action would act as a dampening force in a business boom. On the other hand, if those funds were immediately reloaned by the lending agencies or used as reserves for further blowing up the credit structure, the repayment of old debts could act as an additional explosive force. In short, we are not sure as to what the role of Debt Repayment may be, but it seems fair to assume, given a boom-time situation, that the most deflationary role Debt Repayment would play would be that of a neutral.

But the fixity of farm-family expenditures cannot be ignored as a stabilizing force. The very fact that expenditures for family living fluctuate modestly with changes in income places a floor or support under, and a ceiling over, the economy. It is recognized that this floor may be in the subbasement and the ceiling may be of light weight, but the stabilizing action of the family-living component should not be overlooked. And this stabilizing force becomes exceedingly important in helping to fix the extremes within which the economy may fluctuate.

Summing up this discussion we observe that two different forces emanate from the income-outlay behavior of farm families: an explosive force associated with expenditures for capital goods and a stabilizing force associated with expenditures for family living. These opposing forces grow out of the conflicting economic roles played by farm families--where the farm family acts both as an ultimate consumer and as a business enterpriser. A continuous conflict in the budgetary behavior of farm families is the norm--a competition for disposable income between (1) the wish to maintain and improve the family level of living in the immediate future, and (2) the wish to invest in capital goods and thereby improve the long-run earning capacity of the farm enterprise.

In the upswing of business activity it would appear that expenditures for capital goods play the dominant causal role in the operating economy, employing the major part of any income residual in the purchase of productive goods. But in the downswing of business activity family expenditures appear to come into the dominant causal role. For the farm family is striving to maintain the level of living previously achieved, and expenditures for capital goods dry up with the contracting income residual that is being squeezed between a falling disposable income and a fixed outlay for family living.

Table 5.- Farm family budgets classified by net family income--FSA data--1940

Budget Items	I N C O M E C L A S S E S										\$10,000: All and : Income over : Classes
	\$0 : to : \$999 : 20	\$1,000 : to : \$1,999 : 20	\$2,000 : to : \$2,999 : 241	\$3,000 : to : \$3,999 : 73	\$4,000 : to : \$4,999 : 15	\$5,000 : to : \$5,999 : 15	\$6,000 : to : \$6,999 : 15	\$7,000 : to : \$7,999 : 15	\$8,000 : to : \$8,999 : 15	\$9,000 : to : \$9,999 : 15	
(Budget Frequency) 1/											
Gross cash farm income	1300	1840	2831	3734	4975						2535
Cash operating expenses	1049	908	1155	1368	1674						1095
Net cash farm income	251	932	1676	2366	3301						1439
Value of home production food and fuel house rent	203	231	261	268	264						247
	250	302	322	329	391						313
Off farm income	71	109	180	367	371						173
Net family income	775	1574	2439	3330	4327						2172
Family expenditures food clothing and personal household medical care other	122	169	206	238	253						192
	72	103	134	170	196						124
	64	99	127	155	130						117
	23	33	47	52	45						41
	60	86	127	163	212						113
Family expenditures adjusted:	794	1023	1224	1375	1491						1147
Capital expenditures sale of capital goods livestock land, building & improv. machinery, equip., other	294	2/ 272 - 38	2/ 473 - 59	2/ 859 - 54	1296 - 85						2/ 461 - 48
	0	" 142	" 165	" 269	516						" 189
	165	" 45	" 104	" 267	201						" 100
	6	" 119	" 255	" 390	664						" 221
Debt repayment	497	558	802	1149	1447						750
Total outlay	1585	1853	2499	3383	4234						2358
Liquid asset position	-810	-279	-60	-53	93						-186

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 6.- Income-Outlay patterns expressed as a percentage of net family income by income classes, FSA data, 1940

Budget Items	I N C O M E C L A S S E S									
	: \$0	: \$1,000	: \$2,000	: \$3,000	: \$4,000	: \$5,000	: \$6,000	: \$7,000	: \$8,000	: \$9,000
(Budget Frequency) 1/	: 20	: 287	: 241	: 73	: 15	: 15	: 15	: 15	: 15	: 15
Net family income	: 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures										
food	: 15.7	10.7	8.5	7.1	5.9					
clothing and personal	: 9.3	6.5	5.5	5.1	4.5					
household	: 8.3	6.3	5.2	4.7	3.0					
medical care	: 3.0	2.1	1.9	1.6	1.0					
other	: 7.7	5.5	5.2	4.9	4.9					
Family expenditures adjusted	: 102.5	65.0	50.2	41.3	34.5					
Capital expenditures	: 37.9	2/ 17.3	2/ 19.4	2/ 25.8	30.0					
sale of capital goods	: 0	- 2.4	- 2.4	- 1.6	- 2.0					
livestock	: 21.3	" 9.0	" 6.8	" 8.1	11.9					
land, building and improvement	: 0.8	" 2.9	" 4.3	" 8.0	4.7					
Machinery, equipment, other	: 15.8	" 7.6	" 10.5	" 11.7	15.4					
Debt repayment	: 64.1	35.4	32.9	34.5	33.4					
Total outlay	: 204.5	117.7	102.5	101.6	97.9					
Liquid asset position	: -104.5	-17.7	- 2.5	- 1.6	2.1					

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 7.- Farm family budgets classified by net family income--FSA data--1941

Budget Items	I N C O M E C L A S S E S										\$10,000: All and :Income over:Classes
	\$1,000 : to : \$1,999 :	\$2,000 : to : \$2,999 :	\$3,000 : to : \$3,999 :	\$4,000 : to : \$4,999 :	\$5,000 : to : \$5,999 :	\$6,000 : to : \$6,999 :	\$7,000 : to : \$7,999 :	\$8,000 : to : \$8,999 :	\$9,000 : to : \$9,999 :	\$10,000 : to : \$10,999 :	
(Budget Frequency) 1/	127 :	283 :	163 :	44 :	13 :	13 :	13 :	13 :	13 :	13 :	642
Gross cash farm income	2005	2953	4033	5142	6195						3310
Cash operating expenses	1025	1235	1487	1892	1927						1339
Net cash farm income	980	1718	2546	3250	4268						1971
Value of home production											
food and fuel	276	294	335	364	395						308
house rent	291	310	326	349	341						314
Off farm income	108	144	221	407	375						199
Net family income	1655	2466	3428	4370	5379						2792
Family expenditures											
food	183	219	258	278	276						228
clothing and personal	124	147	182	220	195						158
household	114	142	177	189	179						151
medical care	40	49	62	66	111						54
other	80	130	162	176	194						134
Family expenditures adjusted	1108	1291	1502	1642	1691						1347
Capital expenditures	2/ 383	2/ 642	2/ 920	1317	2/ 2192						2/ 759
sale of capital goods	" - 23	" - 41	" - 53	- 51	" - 159						" - 49
livestock	" 137	" 213	" 249	329	" 831						" 244
land, building and improvement	" 51	" 106	" 159	364	" 730						" 145
machinery, equipment, other	" 216	" 372	" 569	676	" 827						" 421
Debt repayment	578	830	1019	1323	1522						893
Total outlay	2089	2763	3441	4282	5405						2999
Liquid asset position	-414	-297	-13	88	-26						-207

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 9.-- Farm family budgets classified by net family income--FSA data--1942

Budget Items	I N C O M E C L A S S E S										\$10,000: All and :Income over :Classes
	\$1,000 : to : \$1,999	\$2,000 : to : \$2,999	\$3,000 : to : \$3,999	\$4,000 : to : \$4,999	\$5,000 : to : \$5,999	\$6,000 : to : \$6,999	\$7,000 : to : \$7,999	\$8,000 : to : \$8,999	\$9,000 : to : \$9,999	\$10,000 : to : \$10,999	
(Budget Frequency) 1/	36	162	194	140	69	22	13				642
Gross cash farm income	2507	3105	4403	5691	6757	7823	10016				4794
Cash operating expenses	1511	1364	1770	2144	2341	2700	3973				1897
Net cash farm income	996	1741	2633	3547	4416	5123	6043				2897
Value of home production food and fuel house rent	303 288	368 304	405 311	409 321	444 338	475 349	436 344				398 316
Off farm income	136	117	141	174	284	413	539				179
Net family income	1723	2530	3490	4451	5482	6360	7362				3790
Family expenditures											
food	216	246	276	282	324	328	302				275
clothing and personal	144	168	201	211	234	254	228				198
household	143	159	196	225	203	239	334				196
medical care	47	56	80	102	75	109	62				77
other	106	126	189	226	246	233	402				189
Family expenditures adjusted	1247	1427	1658	1776	1864	1987	2108				1649
Capital expenditures	2/ 296	2/ 498	2/ 764	2/ 1110	2/ 1317	2/ 1159	2/ 2038				2/ 854
sale of capital goods	W - 41	W - 31	W - 75	W - 64	W - 56	W - 81	W - 0				W - 55
livestock	" 118	" 214	" 278	" 383	" 426	" 440	" 787				" 313
land, building & improvement	" 50	" 86	" 178	" 240	" 232	" 373	" 607				" 183
machinery, equipment, other	" 174	" 221	" 395	" 556	" 696	" 416	" 588				" 412
Debt repayment	531	748	1053	1250	2046	2492	1822				1186
Total outlay	2074	2673	3475	4136	5227	5638	5968				3689
Liquid asset position	-351	-143	15	315	255	722	1394				101

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 10.- Income-Outlay patterns expressed as a percentage of net family income by income classes--FSA data--1942

Budget Items	I N C O M E C L A S S E S									
	\$1,000 : to :	\$2,000 : to :	\$3,000 : to :	\$4,000 : to :	\$5,000 : to :	\$6,000 : to :	\$7,000 : to :	\$8,000 : to :	\$9,000 : to :	\$10,000 : to :
(Budget Frequency)	1/	36	162	194	140	69	22	13		
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures										
food	12.5	9.7	7.9	6.3	5.9	5.1	4.1			
clothing and personal	8.4	6.6	5.7	4.7	4.3	4.0	3.1			
household	8.3	6.3	5.6	5.1	3.7	3.7	4.5			
medical care	2.7	2.2	2.3	2.3	1.4	1.7	0.8			
other	6.2	5.0	5.4	5.1	4.5	3.7	5.5			
Family expenditures adjusted	72.4	56.4	47.4	39.9	34.0	31.2	28.6			
Capital expenditures										
sale of capital goods	2/ 17.2	2/ 19.7	2/ 22.0	2/ 24.9	2/ 24.0	2/ 18.2	2/ 27.7			
livestock	- 2.4	- 1.2	- 2.1	- 1.4	- 1.0	- 1.3	0			
land, building and improvement	6.8	8.5	8.0	8.6	7.8	6.9	10.7			
machinery, equipment, other	2.9	3.4	5.1	5.4	4.2	5.9	8.2			
other	10.1	8.7	11.3	12.5	12.7	6.5	8.0			
Debt repayment	30.8	29.6	30.2	28.1	37.3	39.2	24.8			
Total outlay	120.4	105.7	99.6	92.9	95.3	88.6	81.1			
Liquid asset position	-20.4	- 5.7	0.4	7.1	4.7	11.4	18.9			

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 11.-- Farm family budgets classified by net family income--College data--1940

Budget Items	I N C O M E C L A S S E S												\$10,000: All and :Income over :Classes
	: Nega- : tive : \$999 : \$1,999 : \$2,999 : \$3,999 : \$4,999 : \$5,999 : \$6,999	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	: : 12 : 12 : 12 : 12 : 12 : 12 : 12	
(Budget Frequency) 1/													
Gross cash farm income	: 5946	: 5043	: 4342	: 4455	: 6572	: 9198	: 12719	: 10362				23969	6655
Cash operating expenses	: 8302	: 5023	: 3365	: 2704	: 3833	: 5811	: 8211	: 5507				14240	4416
Net cash farm income	: -2356	: 20	: 977	: 1751	: 2739	: 3387	: 4508	: 4855				9729	2239
Value of home production													
food and fuel	: 256	: 212	: 244	: 242	: 278	: 291	: 294	: 283				264	261
house rent	: 242	: 210	: 212	: 224	: 257	: 257	: 374	: 369				412	254
Off farm income	: 207	: 226	: 168	: 230	: 228	: 402	: 308	: 923				2529	326
Net family income	: -1651	: 668	: 1601	: 2447	: 3502	: 4337	: 5484	: 6430				12934	3080
Family expenditures													
food	: 261	: 312	: 226	: 248	: 262	: 295	: 346	: 282				341	266
clothing and personal	: 182	: 193	: 162	: 171	: 205	: 249	: 348	: 329				341	207
household	: 330	: 277	: 234	: 272	: 369	: 362	: 465	: 405				714	324
medical care	: 79	: 95	: 70	: 85	: 82	: 111	: 128	: 151				99	90
other	: 357	: 418	: 311	: 401	: 508	: 550	: 789	: 836				1373	482
Family expenditures adjusted	: 1707	: 1717	: 1459	: 1643	: 1961	: 2115	: 2744	: 2655				3544	1884
Capital expenditures	: 1304	: 777	: 737	: 868	: 984	: 1144	: 1302	: 1683				1470	975
sale of capital goods	: -192	: -229	: -141	: -217	: -207	: -327	: -277	: -731				-283	-228
livestock	: 503	: 172	: 255	: 218	: 247	: 367	: 396	: 388				529	288
land, building and improvement	: 99	: 175	: 174	: 263	: 335	: 328	: 400	: 262				344	265
machinery, equipment, other	: 894	: 659	: 449	: 604	: 609	: 776	: 783	: 1764				880	650

1/ Classes with a budget frequency of less than 6 are not shown.

1/ Classes with a budget frequency of less than 6 are not shown.

Table 12.-- Income-Outlay patterns expressed as a percentage of net family income by income classes, College data, 1940

Budget Items	I N C O M E C L A S S E S										
	\$0	\$1,000	\$2,000	\$3,000	\$4,000	\$5,000	\$6,000	\$7,000	\$8,000	\$10,000	\$10,000 and over
(Budget Frequency) 1/	12	91	97	77	32	19	10	:	:	:	8
	P E R C E N T										
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures											
food	46.7	14.1	10.1	7.5	6.8	6.3	4.4				2.6
clothing and personal	28.9	10.1	7.0	5.9	5.7	6.3	5.1				2.6
household	41.5	14.6	11.1	10.5	8.4	8.5	6.3				5.5
medical care	14.2	4.4	3.5	2.4	2.6	2.3	2.4				0.9
other	62.6	19.4	16.4	14.5	12.7	14.4	13.0				10.6
Family expenditures adjusted	257.0	91.1	67.1	56.0	48.8	50.0	41.3				27.4
Capital expenditures											
sale of capital goods	116.3	46.0	35.5	28.1	26.4	23.7	26.2				11.4
livestock	34.3	8.8	8.9	5.9	7.5	5.1	11.3				2.2
land, building and improve.	25.7	15.9	8.9	7.0	8.4	7.2	6.0				4.1
machinery, equip., other	26.2	10.9	10.8	9.6	7.6	7.3	4.1				2.7
	98.7	28.0	24.7	17.4	17.9	14.3	27.4				6.8

1/ Classes with a budget frequency of less than 6 are not shown.

Table 13.- Farm family budgets classified by net family income--College data--1941

Budget Items	I N C O M E C L A S S E S																
	: : Nega- : tive : \$999	: : 0 : to : \$1,000	: : to : \$1,000	: : to : \$2,000	: : to : \$2,000	: : to : \$3,000	: : to : \$3,000	: : to : \$4,000	: : to : \$4,000	: : to : \$5,000	: : to : \$5,000	: : to : \$6,000	: : to : \$6,000	: : to : \$7,000	: : to : \$7,000	: : to : \$8,000	: : to : \$10,000
(Budget Frequency) 1/	: : 9 : 23787	: : 14 : 10039	: : 25 : 7729	: : 26 : 4950	: : 27 : 3063	: : 28 : 3784	: : 29 : 3698	: : 30 : 7371	: : 31 : 10582	: : 32 : 10124	: : 33 : 16504	: : 34 : 17419	: : 35 : 21210	: : 36 : 9002	: : 37 : 5752	: : 38 : 3250	: : 39 : 294
Gross cash farm income																	
Cash operating expenses																	
Net cash farm income																	
Value of home production																	
food and fuel																	
house rent																	
Off farm income																	
Net family income																	
Family expenditures																	
food																	
clothing and personal																	
household																	
medical care																	
other																	
Family expenditures adjusted:																	
Capital expenditures																	
sale of capital goods																	
livestock																	
land, building & improv.																	
machinery, equipment, other:																	

1/ Classes with a budget frequency of less than 6 are not shown.

Table 14.- Income-Outlay patterns expressed as a percentage of net family income
by income classes, College data, 1941

Budget Items	I N C O M E C L A S S E S														
	\$0	\$1,000	\$2,000	\$3,000	\$4,000	\$5,000	\$6,000	\$7,000	\$8,000	\$10,000	to : \$999	to : \$1,999	to : \$2,999	to : \$3,999	to : \$4,999
(Budget Frequency) 1/	14	25	78	66	61	50	23	13	17	11					
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					
Family expenditures															
food	56.1	15.2	10.8	8.5	7.1	5.9	4.7	4.9	4.5	2.9					
clothing and personal	38.1	11.5	7.2	5.9	5.3	5.3	3.8	5.8	4.5	3.0					
household	66.4	17.1	12.5	10.4	7.1	6.5	6.7	7.1	6.2	5.0					
medical care	21.9	4.1	3.3	2.4	2.1	1.9	1.5	1.3	1.9	1.9					
other	55.2	21.5	13.9	12.8	10.5	11.7	9.5	13.8	8.8	12.0					
Family expenditures adjusted	321.5	98.5	66.7	54.9	44.0	42.2	34.8	41.9	36.4	31.4					
Capital expenditures															
sale of capital goods	154.2	76.8	30.3	32.2	29.7	25.6	23.8	20.6	17.3	22.2					
lives tock	-43.5	-14.2	-6.8	-6.7	-7.1	-7.0	-4.7	-4.5	-4.0	-3.5					
land, building & improv.	87.2	33.4	9.0	8.9	5.6	6.9	4.5	5.5	4.6	8.6					
machinery, equip., other	2.0	13.5	4.6	8.1	7.8	7.4	8.3	3.5	2.5	4.2					
	108.5	44.1	23.5	21.9	23.4	18.3	15.7	16.1	14.2	12.9					

1/ Classes with a budget frequency of less than 6 are not shown.

Table 15.- Farm family budgets classified by net family income--College data--1942

Budget Items	I N C O M E C L A S S E S													
	\$1,000:\$2,000	\$2,000:\$3,000	\$3,000:\$4,000	\$4,000:\$5,000	\$5,000:\$6,000	\$6,000:\$7,000	\$7,000:\$8,000	\$8,000:\$10,000	\$10,000: All					
(Budget Frequency)	14	27	52	56	53	42	19	56	44	367				
Gross cash farm income	4829	5410	7857	8540	9604	11077	16821	16136	31393	12880				
Cash operating expenses	3808	3526	5042	4855	4998	5603	10510	8201	16692	7165				
Net cash farm income	1021	1884	2815	3685	4606	5474	6311	7935	14701	5715				
Value of home production														
food and fuel	310	311	344	344	357	378	416	418	414	371				
house rent	167	182	203	247	246	278	295	257	442	266				
Off farm income	89	110	178	200	287	353	438	359	438	279				
Net family income	1587	2487	3540	4476	5496	6483	7460	8969	15995	6631				
Family expenditures														
food	273	302	333	324	319	343	411	404	411	351				
clothing and personal	168	158	231	263	260	276	397	370	448	293				
household	274	300	349	326	412	417	572	408	590	408				
medical care	52	94	99	92	103	128	141	149	146	116				
other	261	380	452	514	540	620	484	992	926	625				
Family expenditures adjusted	1505	1727	2011	2110	2237	2440	2716	2998	3377	2430				
Capital expenditures	657	631	1018	892	984	1277	1553	1878	2484	1327				
sale of capital goods	-206	-201	-195	-246	-172	-230	-213	-373	-243	-236				
livestock	257	222	413	343	349	305	578	597	977	467				
land, building & improv.	176	116	202	239	190	437	319	567	692	348				
machinery, equip., other	430	494	598	556	617	765	869	1087	1058	748				

1/ Classes with a budget frequency of less than 6 are not shown.

Table 16.- Income-Outlay patterns expressed as a percentage of net family income by income classes, College data, 1942

Budget Items	I N C O M E C L A S S E S										
	\$1,000 : to :	\$2,000 : to :	\$3,000 : to :	\$4,000 : to :	\$5,000 : to :	\$6,000 : to :	\$7,000 : to :	\$8,000 : to :	\$10,000 : to :	and over	
(Budget Frequency) 1/	14	27	52	56	53	42	19	56	44		
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Family expenditures											
food	17.2	12.1	9.4	7.2	5.8	5.3	5.5	4.5	2.6		
clothing and personal	10.6	6.3	6.5	5.9	4.7	4.3	5.3	4.1	2.8		
household	17.3	12.1	9.9	7.3	7.5	6.4	7.7	4.5	3.7		
medical care	3.3	3.8	2.8	2.0	1.9	2.0	1.9	1.7	0.9		
other	16.4	15.3	12.8	11.5	9.8	9.6	6.5	11.1	5.8		
Family expenditures adjusted	94.8	69.4	56.8	47.1	40.7	37.6	36.4	33.4	21.1		
Capital expenditures											
sale of capital goods	41.4	25.4	28.8	19.9	17.9	19.7	20.8	20.9	15.5		
livestock	-13.0	- 8.1	- 5.5	- 5.5	- 3.1	- 3.5	- 2.9	- 4.2	- 1.5		
land, building & improv.	16.2	5.9	11.7	7.7	6.3	4.7	7.7	6.7	6.1		
machinery, equip., other	11.1	4.7	5.7	5.3	3.5	6.7	4.3	6.3	4.3		
	27.1	19.9	16.9	12.4	11.2	11.8	11.7	12.1	6.6		

1/ Classes with a budget frequency of less than 6 are not shown.

Table 17.- Farm family budgets classified by size of household--FSA data--1940

Budget Items	Size of Household						
	Two : Member	Three : Member	Four : Member	Five : Member	Six : Member	Seven : Member	
(Budget Frequency) 1/	: 38	: 152	: 175	: 131	: 67	: 37	
Gross cash farm income	: 2189	: 2486	: 2534	: 2601	: 2773	: 2555	
Cash operating expenses	: 963	: 1089	: 1148	: 1127	: 1126	: 1048	
Net cash farm income	: 1226	: 1397	: 1386	: 1474	: 1647	: 1507	
Value of home production							
food and fuel	: 177	: 209	: 231	: 263	: 270	: 300	
house rent	: 297	: 307	: 311	: 311	: 337	: 317	
Off farm income	: 120	: 182	: 176	: 177	: 138	: 178	
Net family income	: 1820	: 2095	: 2104	: 2225	: 2390	: 2302	
Family expenditures							
food	: 154	: 168	: 181	: 195	: 226	: 226	
clothing and personal	: 89	: 105	: 115	: 130	: 149	: 156	
household	: 96	: 115	: 125	: 123	: 110	: 115	
medical care	: 20	: 36	: 43	: 42	: 50	: 43	
other	: 87	: 104	: 109	: 139	: 115	: 110	
Family expenditures adjusted	: 920	: 1044	: 1115	: 1203	: 1257	: 1267	
Capital expenditures	: 2/ 431	: 2/ 515	: 2/ 423	: 2/ 461	: 2/ 544	: 2/ 382	
sale of capital goods	: " 17	: " 60	: " 57	: " 49	: " 26	: " 29	
livestock	: " 147	: " 205	: " 174	: " 206	: " 229	: " 100	
land, building and improvement	: " 103	: " 143	: " 95	: " 88	: " 88	: " 73	
machinery, equipment, other	: " 206	: " 238	: " 213	: " 218	: " 229	: " 233	
Debt repayment	: 640	: 755	: 727	: 794	: 788	: 756	
Total outlay	: 1991	: 2314	: 2265	: 2458	: 2589	: 2405	
Liquid asset position	: -171	: -219	: -161	: -233	: -199	: -103	

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 18.- Farm family budgets classified by size of household with income held constant
FSA data, 1940

Budget Items	Income Class \$1,000-\$1,999									
	Size of Household									
	Two	Three	Four	Five	Six	Seven	Eight			
(Budget Frequency)	1/	24	78	77	53	26	15	7		
Gross cash farm income	:	1824	1889	1880	1812	1846	1764	1531		
Cash operating expenses	:	830	924	969	931	854	852	740		
Net cash farm income	:	994	965	911	881	992	912	791		
Value of home production	:									
food and fuel	:	178	204	218	265	261	286	330		
house rent	:	305	292	309	306	306	299	301		
Off farm income	:	90	109	127	113	63	109	139		
Net family income	:	1567	1570	1565	1565	1622	1606	1561		
Family expenditures	:									
food	:	139	154	165	165	211	214	206		
clothing and personal	:	91	90	103	104	125	131	120		
household	:	92	105	97	108	86	109	70		
medical care	:	21	35	32	32	51	33	20		
other	:	89	77	94	89	92	73	67		
Family expenditures adjusted	:	915	957	1018	1069	1132	1145	1114		
Capital expenditures	:									
sale of capital goods	:	2/ 285	2/ 309	2/ 268	2/ 260	2/ 279	2/ 163	2/ 157		
livestock	:	0	- 48	- 81	- 8	- 30	0	0		
land, building & improvement	:	108	154	183	114	154	59	37		
machinery, equipment, other	:	20	60	68	35	27	4	2		
Debt repayment	:	164	139	98	114	122	83	82		
Total outlay	:	559	571	623	519	468	531	539		
Liquid asset position	:	1759	1837	1909	1848	1879	1839	1810		
	:	-192	-267	-344	-283	-257	-233	-249		

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Continued--

Table 18--Cont'd.--1940

Budget Items	Income Class \$2,000-\$2,999										Income Class \$3,000-\$3,999									
	Size of Household					Size of Household					Size of Household					Size of Household				
(Budget Frequency) 1/	Two : Three	Four	Five	Six	Seven	Two : Three	Four	Five	Six	Seven	Two : Three	Four	Five	Six	Seven	Two : Three	Four	Five	Six	Seven
Gross cash farm income	3031	2967	2838	2813	2849	2684	3755	3805	3721	3711										
Cash operating expenses	1247	1260	1166	1122	1175	1057	1267	1430	1447	1299										
Net cash farm income	1784	1707	1672	1691	1674	1627	2488	2375	2274	2412										
Value of home production																				
food and fuel	166	226	246	255	277	299	200	229	296	269										
house rent	301	327	318	309	342	323	336	321	348	323										
Off farm income	120	227	178	163	103	204	350	352	389	293										
Net family income	2371	2487	2414	2418	2396	2453	3374	3277	3307	3297										
Family expenditures																				
food	205	188	195	207	209	213	182	220	249	265										
clothing and personal	106	117	125	138	145	158	130	153	185	181										
household	125	127	145	128	101	109	139	182	162	161										
medical care	16	40	48	50	51	44	30	70	40	37										
other	99	129	123	150	100	121	149	144	199	194										
Family expenditures adjusted:	1018	1154	1200	1237	1225	1267	1166	1319	1469	1430										
Capital expenditures	614	540	459	453	522	452	1138	840	792	649										
sale of capital goods	52	85	45	74	34	10	51	44	127	12										
livestock	146	190	114	201	213	114	257	276	257	252										
land, building & improv.	210	146	95	102	57	120	548	153	195	125										
machinery, equip., other	310	301	287	227	213	222	384	455	480	284										
Debt repayment	824	885	748	803	872	757	1226	1075	1145	1210										
Total outlay	2456	2679	2407	2493	2619	2476	3530	3234	3406	3289										
Liquid asset position	-85	-92	7	-75	-223	-23	-156	43	-99	8										

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 19.- Farm family budgets classified by size of household, FSA data--1942

Budget Items	Size of Household							
	Two Member	Three Member	Four Member	Five Member	Six Member	Seven Member	Eight Member	
(Budget Frequency) 1/	32	136	186	129	81	29	19	
Gross cash farm income	4491	4743	4713	5148	4737	4558	4646	
Cash operating expenses	1785	1875	1899	2106	1829	1709	1759	
Net cash farm income	2706	2868	2814	3042	2908	2849	2887	
Value of home production								
food and fuel	296	326	379	416	481	453	525	
house rent	313	307	307	316	342	325	324	
Off farm income	134	212	165	174	158	115	269	
Net family income	3449	3713	3665	3948	3889	3742	4005	
Family expenditures								
food	197	234	261	288	302	324	350	
clothing and personal	129	172	190	206	212	234	278	
household	187	190	192	217	193	199	167	
medical care	79	58	76	86	80	113	67	
other	163	174	195	203	185	185	207	
Family expenditures adjusted	1364	1461	1600	1732	1795	1833	1918	
Capital expenditures	2/ 641	2/ 905	2/ 882	2/ 933	2/ 760	2/ 817	734	
sale of capital goods	W -126	W -37	W -79	W -41	W -40	W -5	-90	
livestock	" 276	" 362	" 338	" 296	" 224	" 349	319	
land, building & improvement	" 115	" 197	" 197	" 191	" 178	" 129	111	
machinery, equipment, other	" 375	" 352	" 430	" 464	" 410	" 300	394	
Debt repayment	1191	1189	1190	1201	1181	963	1064	
Total outlay	3196	3555	3672	3866	3736	3613	3716	
Liquid asset position	253	158	- 7	82	153	129	289	

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 20.-- Farm family budgets classified by size of household with income held constant
FSA data--1942

Budget Items	Income Class \$1,000-\$1,999:						Income Class \$2,000-\$2,999					
	Size of Household			Size of Household			Size of Household			Size of Household		
	Three	Four	Five	Two	Three	Four	Five	Six	Three	Four	Five	Six
(Budget Frequency) 1/	10	12	7	9	38	51	28	19	38	51	28	19
Gross cash farm income	2774	2452	2314	3068	3135	3078	3102	3496				
Cash operating expenses	1643	1442	1480	1332	1360	1287	1431	1888				
Net cash farm income	1131	1010	834	1736	1775	1791	1671	1808				
Value of home production food and fuel house rent	205	328	304	260	321	362	382	395				
	298	305	259	384	283	300	322	297				
Off farm income	61	154	247	56	189	79	138	45				
Net family income	1695	1797	1644	2436	2568	2532	2513	2545				
Family expenditures												
food	226	239	214	209	216	235	254	284				
clothing and personal	140	155	144	93	164	167	160	170				
household	168	137	159	160	147	155	181	174				
medical care	44	67	59	46	45	58	53	90				
other	91	122	113	137	125	132	120	94				
Family expenditures adjusted	1172	1353	1332	1289	1301	1409	1472	1504				
Capital expenditures	250	357	2/ 280	405	2/ 517	2/ 529	518	2/ 515				
sale of capital goods	-140	0	0	-139	-52	-23	0	-11				
livestock	130	117	98	130	242	193	265	217				
land, building & improv.	74	55	43	70	71	113	68	144				
machinery, equip., other	186	185	113	344	252	241	185	195				
Debt repayment	451	593	477	1238	758	671	660	835				
Total outlay	1873	2303	1989	2932	2576	2609	2650	2854				
Liquid asset position	-178	-506	-345	-496	-8	-77	-137	-309				

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Continued---

Table 20--Cont'd.--1942

Budget Items	Income Class \$3,000-\$3,999									
	Size of Household									
(Budget Frequency) 1/	Two	Three	Four	Five	Six	Seven	Eight			
	8	36	60	36	25	16	6			
Gross cash farm income	4073	4462	4530	4583	4323	3940	4202			
Cash operating expenses	1585	1741	1923	1813	1712	1455	1952			
Net cash farm income	2488	2711	2607	2770	2611	2485	2250			
Value of home production										
food and fuel	311	319	409	405	456	484	488			
house rent	284	300	310	306	324	348	297			
Off farm income	241	105	176	104	135	119	280			
Net family income	3324	3435	3502	3585	3526	3436	3315			
Family expenditures										
food	168	227	263	292	310	329	335			
clothing and personal	150	163	188	208	222	219	293			
household	200	194	197	200	191	211	178			
medical care	159	53	85	57	70	141	112			
other	214	147	210	213	173	172	177			
Family expenditures adjusted	1486	1403	1672	1681	1746	1904	1880			
Capital expenditures	350	2/ 935	2/ 849	794	616	2/ 573	830			
sale of capital goods	-331	-6	-159	-27	-17	-9	0			
livestock	147	403	347	189	184	188	312			
land, building & improvement	64	180	230	185	130	139	53			
machinery, equipment, other	470	365	437	447	319	224	465			
Debt repayment	1020	1008	1079	1165	1161	660	557			
Total outlay	2858	3346	3600	3640	3523	3137	3267			
Liquid asset position	468	89	-98	-55	3	299	48			

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Continued---

Table 20--Cont'd.--1942

Budget Items	Income Class \$4,000-\$4,999					Income Class \$5,000-\$5,999				
	Size of Household					Size of Household				
(Budget Frequency) 1/	Two : 8	Three : 29	Four : 37	Five : 34	Six : 19	Three : 13	Four : 17	Five : 12	Six : 11	Eight : 6
Gross cash farm income	5945	5648	5791	6035	5135	6844	7070	6519	6706	6267
Cash operating expenses	2240	2075	2153	2468	1851	2552	2571	2112	2083	1940
Net cash farm income	3705	3573	3638	3567	3284	4292	4499	4407	4623	4327
Value of home production										
food and fuel	281	316	382	434	564	400	372	451	537	545
house rent	241	320	306	315	403	355	313	311	359	313
Off farm income	179	186	87	214	215	455	255	233	55	307
Net family income	4406	4395	4413	4530	4466	5502	5439	5402	5574	5492
Family expenditures										
food	214	237	294	283	314	280	266	326	314	438
clothing and personal	141	186	204	225	229	201	213	206	218	352
household	226	220	248	228	212	211	181	205	196	203
medical care	90	82	87	147	90	55	85	75	89	47
other	158	218	255	225	234	257	217	215	271	320
Family expenditures adjusted:	1351	1579	1776	1857	2046	1759	1647	1789	1984	2218
Capital expenditures	1108	2/1086	1229	2/1141	2/926	2/1446	1197	1572	2/1320	1092
sale of capital goods	0	-21	-92	-85	-109	-61	-44	-128	-59	0
livestock	470	"	425	"	"	"	458	400	"	307
land, building & improv.	189	"	220	"	"	211	232	249	"	235
machinery, equip., other	449	"	676	"	"	642	551	1051	"	550
Debt repayment	1105	1229	1254	1341	1201	2323	2705	1757	1535	1695
Total outlay	3564	3894	4259	4339	4173	5528	5549	5118	4839	5005
Liquid asset position	842	501	154	191	293	-26	-110	284	735	487

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 21.-- Farm family budgets classified by size of household--College data--1940

Budget Items	Size of Household							
	Two : Member :	Three : Member :	Four : Member :	Five : Member :	Six : Member :	Seven : Member :	Eight : Member :	
(Budget Frequency) 1/	34 :	63 :	91 :	71 :	67 :	17 :	17 :	
Gross cash farm income	5836	6586	6096	5213	8102	10291	8949	
Cash operating expenses	3806	4664	3758	2978	5867	7215	6444	
Net cash farm income	2030	1922	2338	2235	2235	3076	2505	
Value of home production								
food and fuel	198	233	247	256	287	306	401	
house rent	274	281	249	259	228	229	287	
Off farm income	115	374	390	329	331	233	373	
Net family income	2617	2810	3224	3079	3081	3844	3566	
Family expenditures								
food	204	244	248	270	291	356	365	
clothing and personal	118	166	187	218	255	285	331	
household	295	323	362	305	301	384	346	
medical care	64	106	88	66	100	134	102	
other	374	587	428	449	470	529	768	
Family expenditures adjusted	1527	1939	1809	1823	1932	2223	2600	
Capital expenditures								
sale of capital goods	974	903	931	829	1256	1046	1038	
livestock	-246	-195	-238	-203	-262	-284	-198	
land, building & improvement:	253	290	278	222	393	246	342	
machinery, equipment, other :	287	189	236	287	350	400	120	
	680	619	655	523	775	684	774	

1/ Classes with a budget frequency of less than 6 are not shown.

Table 22. Farm family budgets classified by size of household with income held constant
College data--1940

Budget Items	Income Class \$1,000-\$1,999										Income Class \$2,000-\$2,999									
	Size of Household					Size of Household					Size of Household					Size of Household				
	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6
(Budget Frequency) 1/	9	21	21	13	13	18	13	18	13	18	13	18	22	23	9	23	9	23	9	7
Gross cash farm income	3986	3799	3207	4328	6725	3998	4556	4292	3693	5790	5386									
Cash operating expenses	2878	2897	2154	3344	5774	2063	2722	2620	1911	4306	3710									
Net cash farm income	1108	902	1053	984	951	1935	1834	1672	1782	1484	1676									
Value of home production																				
food and fuel	219	235	214	250	265	175	198	245	247	306	287									
house rent	207	280	204	188	185	214	225	228	221	230	231									
Off farm income	74	169	121	302	182	144	157	257	215	541	222									
Net family income	1608	1586	1592	1724	1583	2468	2414	2402	2465	2561	2416									
Family expenditures																				
food	150	208	220	245	275	194	227	242	257	289	306									
clothing and personal	88	139	152	159	209	117	153	171	177	250	209									
household	203	258	292	196	224	269	257	253	290	340	293									
medical care	35	75	68	42	105	59	115	80	67	85	153									
other	278	366	267	241	337	338	522	395	282	447	378									
Family expenditures adjusted	1180	1561	1417	1321	1600	1366	1697	1614	1541	1947	1857									
Capital expenditures																				
sale of capital goods	707	695	609	597	1144	751	802	818	757	1251	1113									
livestock	79	175	133	59	200	158	199	277	236	182	121									
land, building and improv.	231	172	245	161	471	191	144	304	184	236	274									
machinery, equip., other	219	140	74	206	311	379	230	108	292	393	379									
	336	558	422	289	562	339	627	683	517	804	581									

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 22--Cont'd.--1940

Budget Items	Income Class \$3,000-\$3,999						Income Class \$4,000-\$4,999					
	Size of Household						Size of Household					
	2	3	4	5	6	7	2	3	4	5	6	7
(Budget Frequency) 1/	6	10	21	17	18	7	6	10	21	17	18	7
Gross cash farm income	8282	8144	7380	5614	5271	6800	7010	12883				
Cash operating expenses	5267	3663	4898	2672	2594	3506	3341	9692				
Net cash farm income	3015	2481	2682	2942	2677	3294	3669	3191				
Value of home production food and fuel	178	285	264	259	311	250	294	260				
house rent	357	304	232	279	225	267	273	266				
Off farm income	73	351	231	117	278	384	405	563				
Net family income	3623	3421	3409	3597	3491	4195	4641	4280				
Family expenditures												
food	253	282	245	260	266	264	293	354				
clothing and personal	153	179	161	209	264	189	251	317				
household	382	349	505	308	301	373	407	343				
medical care	38	118	74	57	102	111	110	106				
other	470	673	335	575	623	507	619	564				
Family expenditures adj.	1831	2190	1816	1947	2092	1961	2247	2210				
Capital expenditures	1367	711	1168	891	918	1102	674	2062				
sale of capital goods	-338	-178	-158	-246	-247	-357	-162	-577				
livestock	298	191	229	311	150	299	156	710				
land, building & improv.	198	192	604	191	369	359	294	546				
machinery, equip., other	1209	506	493	635	646	801	386	1383				

1/ Classes with a budget frequency of less than 6 are not shown.

Table 23.- Farm family budgets classified by size of household--College data--1941

Budget Items	Size of Household									
	Two	Three	Four	Five	Six	Seven	Eight	Nine		
(Budget Frequency) 1/	Member : 38	Member : 63	Member : 87	Member : 80	Member : 55	Member : 20	Member : 14	Member : 6		
Gross cash farm income	7147	8838	8913	8440	9954	11490	12783	8672		
Cash operating expenses	3892	5975	8469	4988	6698	9464	8450	5027		
Net cash farm income	3255	2863	3444	3452	3256	2026	4333	3645		
Value of home production										
food and fuel	216	247	284	298	346	333	466	358		
house rent	282	276	277	240	225	216	315	218		
Off farm income	237	258	292	280	294	316	282	407		
Net family income	3990	3644	4297	4270	4121	2891	5396	4628		
Family expenditures										
food	239	268	306	294	365	357	394	382		
clothing and personal	149	193	243	277	299	241	342	257		
household	361	377	398	350	379	426	304	283		
medical care	85	95	93	85	123	126	79	147		
other	499	481	597	421	611	508	537	498		
Family expenditures adj.	1831	1937	2198	1965	2348	2207	2437	2143		
Capital expenditures										
sale of capital goods	1206	1269	1287	1231	1198	1260	1578	1509		
livestock	-236	-200	-318	-251	-324	-410	-257	-332		
land, building & improv.	326	406	354	303	399	496	592	237		
machinery, equip., other	209	291	285	347	250	218	353	257		
	907	772	966	832	873	956	890	1347		

1/ Classes with a budget frequency of less than 6 are not shown.

Table 24.- Farm family budgets classified by size of household with income held constant
College data--1941

Budget Items	Income Class \$2,000-\$2,999						Income Class \$3,000-\$3,999					
	Size of Household						Size of Household					
	2	3	4	5	6		2	3	4	5	6	
(Budget Frequency) 1/	8	14	24	16	9		10	14	16	13	6	
Gross cash farm income	4034	4386	5281	5336	5566		5740	7126	5929	5301	10665	
Cash operating expenses	2004	2519	3416	3360	3868		3124	4499	3286	2639	7775	
Net cash farm income	2030	1867	1865	1976	1698		2616	2627	2643	2662	2890	
Value of home production												
food and fuel	176	252	266	292	309		205	235	281	299	285	
house rent	185	234	259	207	130		254	261	278	243	203	
Off farm income	239	136	110	121	329		220	344	314	236	216	
Net family income	2630	2489	2500	2596	2466		3295	3467	3516	3440	3593	
Family expenditures												
food	222	298	262	267	343		222	267	301	340	323	
clothing and personal	148	165	185	199	237		132	180	212	230	292	
household	225	319	363	338	292		387	389	374	317	365	
medical care	64	75	81	86	134		55	70	122	94	62	
other	329	305	409	360	317		485	409	478	390	423	
Family expenditures adjusted	1349	1648	1825	1749	1762		1740	1811	2046	1913	1953	
Capital expenditures	735	709	863	649	784		1295	1214	877	1081	1718	
sale of capital goods	-65	-136	-215	-169	-107		-263	-139	-237	-342	-253	
livestock	215	243	236	232	262		164	344	251	302	720	
land, building & improv.	85	94	141	68	126		381	403	124	307	303	
machinery, equipment, other	500	508	701	518	503		1013	606	739	814	948	

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 24--Cont'd.--1941

Budget Items	Income Class \$4,000-\$4,999										Income Class \$5,000-\$5,999										I.C. \$6,000-\$6,999									
	Size of Household										Size of Household										Size of Household									
	2	3	4	5	6	7	8	9	10	11	2	3	4	5	6	7	8	9	10	11	2	3	4	5	6	7	8	9	10	11
(Budget Frequency) 1/	9	7	9	17	9	17	9	17	9	17	9	7	9	17	9	17	9	17	9	17	9	7	9	17	9	17	9	17	9	17
Gross cash farm income	6590	7440	7613	8130	8390	11811	9251	12390	10113	9845	9763																			
Cash operating expenses	2819	3742	3893	4482	2918	7078	4745	7485	5527	4273	4543																			
Net cash farm income	3771	3698	3720	3648	3472	4733	4506	4905	4588	5572	5220																			
Value of home production																														
food and fuel	228	173	251	306	318	301	291	318	412	293	297																			
house rent	271	286	183	282	240	237	278	246	222	230	226																			
Off farm income	143	174	289	289	537	254	439	237	182	247	476																			
Net family income	4413	4331	4443	4525	4567	5525	5514	5706	5404	6342	6219																			
Family expenditures																														
food	273	273	295	284	391	291	305	365	359	223	286																			
clothing and personal	151	247	257	253	252	197	245	484	298	150	296																			
household	264	371	301	324	369	459	383	440	288	302	474																			
medical care	78	71	57	78	164	100	94	110	102	85	73																			
other	435	593	279	413	660	473	709	412	797	643	611																			
Family expenditures adj.	1700	2014	1623	1940	2394	2058	2305	2375	2478	1926	2263																			
Capital expenditures	1288	1051	1487	1432	1296	1677	1626	1526	1058	1767	1380																			
sale of capital goods	-344	-233	-160	-314	-362	-289	-505	-273	-422	-460	-269																			
livestock	300	277	119	188	420	464	399	414	232	218	213																			
land, building & improv.	217	316	407	545	256	513	397	513	365	685	500																			
machinery, equip., other:	1115	691	1121	1013	982	989	1335	872	883	1324	936																			

1/ Classes with a budget frequency of less than 6 are not shown.

Table 25.- Farm family budgets classified by size of household--College data--1942

Budget Items	Size of Household							
	Two : Member	Three : Member	Four : Member	Five : Member	Six : Member	Seven : Member	Eight : Member	
(Budget Frequency) 1/	40	60	83	90	50	25	11	
Gross cash farm income	12013	12105	12086	12995	13492	16187	15041	
Cash operating expenses	7157	6627	6534	6746	7836	9727	9450	
Net cash farm income	4856	5478	5552	6249	5656	6460	5591	
Value of home production								
food and fuel	280	299	364	384	424	461	530	
house rent	306	308	271	244	247	206	242	
Off farm income	326	319	233	313	294	169	214	
Net family income	5768	6404	6420	7190	6621	7295	6577	
Family expenditures								
food	254	321	322	375	408	412	435	
clothing and personal	182	238	266	336	376	327	407	
household	401	385	403	441	443	344	366	
medical care	104	96	126	111	110	141	172	
other	681	602	556	545	842	693	683	
Family expenditures adjusted	2208	2249	2308	2436	2850	2584	2836	
Capital expenditures								
sale of capital goods	1255	1370	1267	1393	1211	1560	1318	
livestock	-263	-215	-213	-238	-288	-218	-255	
land, building & improv.	456	525	379	427	434	785	720	
machinery, equip., other	322	361	345	345	410	289	159	
	740	699	756	859	665	704	694	

1/ Classes with a budget frequency of less than 6 are not shown.

Table 26.-- Farm family budgets classified by size of household with income held constant
College data--1942

Budget Items	Income Class \$3,000-\$3,999										Income Class \$4,000-\$4,999									
	Size of household										Size of household									
	2	3	4	5	6	7	8	9	10	11	2	3	4	5	6	7	8	9	10	11
(Budget Frequency) 1/	6	9	11	8	10	7	8	10	11	12	6	9	11	12	6	9	11	12	6	12
Gross cash farm income	7696	6506	7375	8712	7594	8643	7653	7364	10233	8146										
Cash operating expenses	4668	3402	4802	5995	4950	4830	4019	3744	6606	4471										
Net cash farm income	3028	3104	2773	2717	2644	3813	3634	3620	3627	3675										
Value of home production																				
food and fuel	245	281	375	344	386	267	290	359	361	388										
house rent	200	165	245	180	214	211	336	232	272	237										
Off farm income	85	20	143	241	211	319	171	216	160	181										
Net family income	3558	3570	3536	3482	3455	4610	4431	4427	4420	4481										
Family expenditures																				
food	280	272	318	410	332	227	306	302	353	384										
clothing and personal	168	152	249	184	332	213	248	219	296	289										
household	340	352	366	392	298	444	291	332	237	363										
medical care	67	71	123	130	87	73	99	106	79	87										
other	270	498	350	365	692	463	832	436	410	525										
Family expenditures adj.	1570	1791	2026	2005	2341	1898	2402	1986	2008	2273										
Capital expenditures	623	981	993	1186	1076	712	788	904	986	972										
sale of capital goods	-109	-168	-182	-140	-236	-567	-162	-240	-226	-211										
livestock	380	451	464	315	402	293	208	329	424	422										
land, building & improv.	45	245	61	294	428	156	421	117	250	314										
machinery, equip., other	307	453	650	717	482	830	321	698	538	447										

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 26--Cont'd.--1942

Budget Items	Income Class \$5,000-\$5,999										Income Class \$6,000-\$6,999										I. C. \$8,000-\$9,999									
	Size of Household					Size of Household					Size of Household					Size of Household					Size of Household					Size of Household				
	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6	2	3	4	5	6
(Budget Frequency) 1/	8	8	8	13	14	7	7	7	14	14	8	8	8	14	14	10	10	10	10	10	10	10	10	10	10	10	10	10	10	17
Gross cash farm income	9472	9657	9835	8855	8855	9584	9584	12355	10641	10641	14738	13658	16229																	
Cash operating expenses	4842	4855	5240	4244	4244	4361	4361	6806	5229	5229	7312	5540	8222																	
Net cash farm income	4630	4802	4595	4611	4611	5223	5223	5549	5412	5412	7426	8118	8007																	
Value of home production food and fuel house rent	249	284	394	364	364	333	333	341	355	355	300	359	443																	
Off farm income	318	290	224	169	169	281	281	284	295	295	265	277	271																	
Net family income	414	161	337	232	232	576	576	378	355	355	654	209	436																	
Family income	5611	5537	5550	5376	5376	6413	6413	6552	6417	6417	8645	8963	9157																	
Family expenditures																														
food	226	371	272	363	363	266	266	374	377	377	406	330	381																	
clothing and personal	168	286	244	295	295	231	231	299	321	321	286	285	494																	
household	373	372	361	499	499	459	459	419	433	433	404	350	541																	
medical care	130	91	64	105	105	139	139	144	94	94	100	198	108																	
other	556	273	485	636	636	661	661	695	492	492	786	719	770																	
Family expenditures adj.	2020	1967	2044	2431	2431	2370	2370	2556	2367	2367	2497	2518	3008																	
Capital expenditures	1020	1044	854	1135	1135	1233	1233	1385	1187	1187	2048	1660	2251																	
sale of capital goods	-128	-358	-104	-234	-234	-210	-210	-327	-202	-202	-396	-233	-371																	
livestock	350	304	324	421	421	276	276	235	419	419	1029	432	388																	
land, building & improv.	269	255	199	155	155	464	464	459	394	394	591	435	665																	
machinery, equip., other	529	843	435	793	793	703	703	1018	576	576	824	1026	1569																	

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 26--Cont'd.--1942

Budget Items	Income Class \$10,000 and over					
	Size of household					
	3	4	5	6	7	8
(Budget Frequency) 1/	7	8	14	6	6	6
Gross cash farm income	32539	35239	25351	35748		
Cash operating expenses	19859	17970	11629	18355		
Net cash farm income	12680	17269	13722	17393		
Value of home production						
food and fuel	339	427	360	510		
house rent	727	358	332	395		
Off farm income	334	324	567	222		
Net family income	14080	18378	15001	18520		
Family expenditures						
food	349	389	419	483		
clothing and personal	379	456	414	688		
household	601	595	570	582		
medical care	90	176	140	120		
other	868	906	584	1885		
Family expenditures adjusted	3353	3307	2819	4663		
Capital expenditures	3151	2691	1723	1515		
sale of capital goods	-109	-385	-150	-442		
livestock	1247	734	610	445		
land, building & improvement	413	1481	454	157		
machinery, equipment, other	1600	861	809	1355		

1/ Classes with a budget frequency of less than 6 are not shown.

Table 27.- Farm family budgets falling within the \$1,000-\$1,999 income class in 1940 reclassified into 1942 income positions, FSA data

Budget Items	1940 Budgetary Data: 1942 Budgetary Data by Income Classes									
	: \$1,000-\$1,999	: \$1,000-\$1,999	: \$2,000-\$2,999	: \$3,000-\$3,999	: \$4,000-\$4,999	: \$5,000-\$5,999	: \$6,000-\$6,999	: \$7,000-\$7,999	: \$8,000-\$8,999	: \$9,000-\$9,999
(Budget Frequency) 1/	: 287	: 26	: 110	: 87	: 48	: 10				
Gross cash farm income	: 1840	: 2466	: 2942	: 4246	: 5689	: 6103				
Cash operating expenses	: 908	: 1455	: 1238	: 1694	: 2088	: 1954				
Net cash farm income	: 932	: 1011	: 1704	: 2552	: 3601	: 4149				
Value of home production										
food and fuel	: 231	: 292	: 369	: 406	: 398	: 394				
house rent	: 302	: 298	: 303	: 301	: 315	: 302				
Off farm income	: 109	: 136	: 113	: 169	: 143	: 455				
Net family income	: 1574	: 1737	: 2489	: 3428	: 4457	: 5300				
Family expenditures										
food	: 169	: 235	: 239	: 270	: 252	: 274				
clothing	: 103	: 148	: 155	: 189	: 199	: 216				
household	: 99	: 159	: 152	: 177	: 204	: 184				
medical care	: 33	: 47	: 49	: 79	: 63	: 79				
other	: 86	: 113	: 118	: 176	: 207	: 252				
Family expenditures adj.	: 1023	: 1292	: 1385	: 1598	: 1638	: 1701				
Capital expenditures	: 272	: 299	: 501	: 692	: 1066	: 1349				
sale of capital goods	: -38	: -24	: -14	: -87	: -46	: -50				
livestock	: 142	: 108	: 215	: 232	: 383	: 372				
land, building & improv.	: 45	: 55	: 79	: 177	: 185	: 277				
machinery, equip., other	: 119	: 170	: 229	: 370	: 548	: 738				
Debt repayment	: 558	: 536	: 648	: 1050	: 1148	: 1996				
Total outlay	: 1853	: 2127	: 2534	: 3340	: 3852	: 5046				
Liquid asset position	: -279	: -390	: -45	: 88	: 605	: 254				

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence the total was computed from a larger group of observations than the individual capital items and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 28.- Farm family budgets falling within the \$2,000-\$2,999 income class in 1940 reclassified into 1942 income positions, FSA data

Budget Items	1940 Budgetary Data: 1942 Budgetary Data by Income Classes									
	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999	: \$2,000-\$2,999
(Budget Frequency) 1/	: 241	: 41	: 83	: 63	: 34	: 11				
Gross cash farm income	2831	3560	4487	5574	6699	7114				
Cash operating expenses	1155	1712	1788	2073	2194	2335				
Net cash farm income	1676	1848	2699	3501	4505	4779				
Value of home production										
food and fuel	261	362	410	418	429	541				
house rent	322	322	324	313	344	339				
Off farm income	180	113	94	197	157	679				
Net family income	2439	2645	3527	4429	5435	6338				
Family expenditures										
food	206	259	280	293	309	322				
clothing and personal	134	193	205	220	225	261				
household	127	179	206	242	190	236				
medical care	47	69	79	126	67	102				
other	127	147	198	232	217	217				
Family expenditures adj.	1224	1531	1701	1844	1781	2018				
Capital expenditures	473	2/ 471	2/ 829	2/ 1042	2/ 1234	2/ 1178				
sale of capital goods	-59	-88	-14	-61	-47	0				
livestock	165	" 228	" 287	" 281	" 447	" 293				
land, building & improv.	104	" 82	" 184	" 249	" 222	" 266				
machinery, equip., other	255	" 233	" 370	" 579	" 593	" 600				
Debt repayment	802	934	1070	1274	2153	2368				
Total outlay	2499	2936	3600	4160	5168	5564				
Liquid asset position	-60	-291	-73	269	267	774				

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 29.- Farm family budgets falling within the \$3,000-\$3,999 Income Class in 1940 reclassified into 1942 income positions, FSA data

Budget Items	:Budgetary Data 1940: 1942 Budgetary Data by Income Classes					
	: \$3,000-\$3,999	: \$3,000- : \$4,000- : \$5,000- : \$6,000- : \$7,000-				
(Budget Frequency) 1/	: Income Class	: \$3,999 : \$4,999 : \$5,999 : \$6,999 : \$7,999				
	: 73	: 17 : 21 : 18 : 6				
Gross cash farm income	: 3734	: 4613	: 5865	: 6656	: 8213	: 9654
Cash operating expenses	: 1368	: 1873	: 2301	: 2408	: 2865	: 3602
Net cash farm income	: 2366	: 2740	: 3564	: 4248	: 5348	: 6052
Value of home production						
food and fuel	: 268	: 401	: 429	: 515	: 468	: 477
house rent	: 329	: 318	: 330	: 338	: 385	: 348
Off farm income	: 367	: 239	: 179	: 444	: 138	: 500
Net family income	: 3330	: 3698	: 4502	: 5545	: 6339	: 7377
Family expenditures						
food	: 238	: 315	: 304	: 391	: 315	: 295
clothing	: 170	: 241	: 217	: 268	: 267	: 237
household	: 165	: 239	: 248	: 234	: 258	: 320
medical care	: 52	: 108	: 121	: 76	: 110	: 55
other	: 163	: 203	: 270	: 300	: 255	: 480
Family expenditures adj.	: 1375	: 1825	: 1919	: 2122	: 2058	: 2212
Capital expenditures	: 2/ 859	: 788	: 1272	: 2/1477	: 1122	: 2/1643
sale of capital goods	: -54	: -52	: -95	: -39	: 0	: 0
livestock	: 269	: 183	: 515	: 248	: 617	: 326
land, building & improv.	: 267	: 168	: 333	: 264	: 238	: 684
machinery, equip., other	: 390	: 489	: 519	: 974	: 267	: 418
Debt repayment	: 1149	: 1067	: 1494	: 1824	: 2341	: 2005
Total outlay	: 3383	: 3680	: 4685	: 5423	: 5521	: 5860
Liquid asset position	: -53	: 18	: -183	: 123	: 818	: 1517

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 30.- Farm family budgets falling with the \$1,000-\$1,999 income class in 1940 reclassified into 1942 income positions, College data

:1940 Budgetary:											
Budget Items		Data : \$1,000: \$2,000: \$3,000: \$4,000: \$5,000:\$6,000									
: \$1,000-\$1,999:		to :		to :		to :		to :		to :	
: Income Class :		: \$1,999: \$2,999: \$3,999: \$4,999: \$5,999:\$6,999		: \$1,999: \$2,999: \$3,999: \$4,999: \$5,999:\$6,999		: \$1,999: \$2,999: \$3,999: \$4,999: \$5,999:\$6,999		: \$1,999: \$2,999: \$3,999: \$4,999: \$5,999:\$6,999		: \$1,999: \$2,999: \$3,999: \$4,999: \$5,999:\$6,999	
(Budget Frequency)	1/	91	8	14	15	16	15	16	15	16	15
Gross cash farm income	:	4342	4011	5011	7951	8515	10767	12118			
Cash operating expenses	:	3365	2990	3266	5193	4732	6095	6341			
Net cash farm income	:	977	1021	1745	2758	3783	4672	5777			
Value of home production	:										
food and fuel	:	244	333	318	350	317	336	350			
house rent	:	212	155	159	245	206	267	289			
Off farm income	:	168	55	153	173	147	275	187			
Net family income	:	1801	1564	2375	3526	4453	5550	6603			
Family expenditures	:										
food	:	226	237	298	323	286	347	323			
clothing	:	162	151	164	250	222	267	198			
household	:	234	267	286	363	298	467	231			
medical care	:	70	28	81	99	91	137	97			
other	:	311	179	424	471	361	296	313			
Family expenditures adj.	:	1459	1350	1730	2101	1781	2117	1801			
Capital expenditures	:	737	500	566	1164	868	1289	910			
sale of capital goods	:	-141	-124	-163	-240	-236	-157	-97			
livestock	:	255	160	199	406	322	380	303			
land, building & improv.	:	174	86	129	214	144	89	273			
machinery, equip., other	:	449	378	401	784	638	977	431			
1/ Classes with a budget frequency of less than 6 are not shown.											

Table 31.- Farm family budgets falling within the \$2,000-\$2,999 income class in 1940 reclassified into 1942 income positions, College data

Budget Items	1942 Budgetary Data by Income Classes												
	:1940 Budgetary:												
	Data :												
	: \$2,000-\$2,999: to : to : to : to : to : to : to : to : to : to :												
(Budget Frequency) 1/	97	8	17	19	16	13	6	10					
Gross cash farm income	4455	5365	5871	6645	8520	9940	16188	14746					
Cash operating expenses	2704	3384	2772	2961	3767	4505	9892	6757					
Net cash farm income	1751	1981	3099	3684	4753	5435	6296	7989					
Value of home production													
food and fuel	242	312	302	335	311	375	360	416					
house rent	224	189	157	263	207	215	277	204					
Off farm income	230	70	80	167	142	435	645	336					
Net family income	2447	2552	3638	4449	5413	6460	7578	8945					
Family expenditures													
food	248	306	309	368	329	374	325	393					
clothing and personal	171	154	205	321	236	261	277	268					
household	272	270	289	292	461	440	412	311					
medical care	85	115	102	74	82	126	75	92					
other	401	316	459	657	548	838	263	1257					
Family expenditures adj.	1643	1662	1823	2310	2174	2629	1989	2941					
Capital expenditures	868	730	789	774	956	954	1358	1119					
sale of capital goods	-217	-323	-128	-224	-216	-325	-409	-446					
livestock	218	229	311	242	407	225	535	600					
land, building & improv.	263	124	199	316	248	498	497	154					
machinery, equip., other	604	700	407	440	517	556	735	811					

1/ Classes with a budget frequency of less than 6 are not shown.

Table 32.- Farm family budgets falling within the \$3,000-\$3,999 income class in 1940 reclassified into 1942 income position¹, College data

Budget Items	1940 Budgetary: 1942 Budgetary Data by Income Classes									
	data	\$3,000	\$4,000	\$5,000	\$6,000	\$8,000	\$10,000			
(Budget Frequency)	1/	77	12	15	11	13	to : and	\$9,999:	over	12 : 7
Gross cash farm income	:	6572	7810	10971	9065	10375		15930	25127	
Cash operating expenses	:	3833	5270	7260	4520	5049		7715	12709	
Net cash farm income	:	2739	2540	3711	4545	5326		8215	12418	
Value of home production	:									
food and fuel	:	278	374	380	405	373		392	303	
house rent	:	257	213	241	268	283		247	323	
Off farm income	:	228	284	190	284	465		248	602	
Net family income	:	3502	3411	4522	5502	6447		9102	13646	
Family expenditures	:									
food	:	262	342	309	300	327		347	346	
clothing and personal	:	205	281	235	267	314		520	304	
household	:	369	341	345	305	381		392	564	
medical care	:	82	107	79	85	120		116	226	
other	:	508	448	438	675	605		888	757	
Family expenditures adj.	:	1961	2106	2027	2305	2403		2902	2823	
Capital expenditures	:	984	970	961	810	1567		1844	1214	
sale of capital goods	:	-207	-252	-221	-234	-115		-397	-237	
livestock	:	247	412	461	290	262		393	360	
land, building & improv.	:	335	267	135	356	454		759	366	
machinery, equip., other	:	609	543	586	398	966		1089	725	

1/ Classes with a budget frequency of less than 6 are not shown.

Table 33.- Average 1942 Budgets classified by size of income change between 1940 and 1942
FSA data

Budget Items	: 1940 Income Class \$1,000-\$1,999 : 1940 Income Class \$2,000-\$2,999									
	: Income Change between : Average : Income Change between					: 1940 and 1942 : 1940 and 1942				
	: all : all : all : all : all					: all : all : all : all : all				
	: cases : cases : cases : cases : cases					: cases : cases : cases : cases : cases				
(Budget Frequency) 1/	287	27	120	81	59	241	33	88	69	49
Gross cash farm income	1840	2446	3080	4327	6214	2831	3706	4381	5445	7062
Cash operating expenses	908	1333	1306	1733	2261	1155	1941	1752	1969	2382
Net cash farm income	932	1113	1774	2594	3953	1676	1765	2629	3476	4680
Value of home production food and fuel	231	338	361	406	391	261	385	412	405	448
house rent	302	310	301	296	319	322	316	326	314	342
Off farm income	109	95	120	176	237	180	100	114	174	328
Net family income	1574	1856	2556	3472	4900	2439	2566	3481	4369	5798
Family expenditures	169	244	241	268	255	206	263	287	282	306
food	103	148	157	190	202	134	194	206	216	234
clothing and personal	99	139	162	176	206	127	188	206	232	211
household	33	49	53	75	68	47	70	80	118	74
medical care	86	125	120	179	223	127	157	193	228	219
other	1023	1353	1395	1590	1664	1224	1573	1710	1797	1834
Family expenditures Adj.	2/	272	2/	273	2/	2/	2/	2/	2/	2/
Capital expenditures	2/	272	2/	273	2/	2/	2/	2/	2/	2/
sale of capital goods	2/	272	2/	273	2/	2/	2/	2/	2/	2/
livestock	2/	272	2/	273	2/	2/	2/	2/	2/	2/
land, building & improv.	2/	272	2/	273	2/	2/	2/	2/	2/	2/
machinery, equip., other	2/	272	2/	273	2/	2/	2/	2/	2/	2/
Debt repayment	558	540	700	1023	1484	802	1012	1010	1287	2192
Total outlay	1853	2170	2593	3350	4344	2499	3125	3489	4078	5328
Liquid asset position	-279	-314	-37	122	556	-60	-559	-8	291	470

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Continued---

Table 33--Cont'd.--1942

Budget Items	1940 Income Class \$3,000-\$3,999					
	Average	Income Change between 1940 and 1942				
	all	-\$500-	\$500-	\$1,500-	\$2,500 &	
(Budget Frequency) 1/	Cases	\$499	\$1,499	\$2,499	over	
	73	8	26	19	14	
Gross cash farm income	3734	4375	5529	6344		8871
Cash operating expenses	1368	1712	2234	2204		3315
Net cash farm income	2366	2663	3295	4140		5556
Value of home production food and fuel house rent	268	367	414	519		471
	329	336	320	315		390
Off farm income	367	199	257	422		279
Net family income	3330	3565	4286	5396		6696
Family expenditures						
food	238	262	315	391		303
clothing and personal	170	198	235	266		243
household	155	229	245	224		282
medical care	52	116	125	76		77
other	163	189	261	303		334
Family expenditures adjusted	1375	1697	1915	2094		2100
Capital expenditures	859	869	1121	2/1433		2/1416
sale of capital goods	-54	0	-88	-54		-22
livestock	269	186	437	250		463
land, building & improv.	267	253	272	209		487
machinery, equip., other	390	430	500	996		398
Debt repayment	1149	989	1271	1840		2215
Total outlay	3383	3555	4307	5367		5731
Liquid asset position	-53	10	-21	29		965

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 34.- Average 1942 budgets classified by size of income change between 1940 and 1942
College data

Budget Items	1940 Income Class \$1,000-\$1,999										1940 Income Class \$2,000-\$2,999									
	Average:Income Change between 1940 & '42:					Average:Income Change between 1940 & '42:					Average:Income Change between 1940 & '42:					Average:Income Change between 1940 & '42:				
	all	-\$500-:\$500-	-\$500-:\$1,500-	-\$1,500-:\$2,500 &	over	all	-\$500-:\$500-	-\$500-:\$1,500-	-\$1,500-:\$2,500 &	over	all	-\$500-:\$500-	-\$500-:\$1,500-	-\$1,500-:\$2,500 &	over	all	-\$500-:\$500-	-\$500-:\$1,500-	-\$1,500-:\$2,500 &	over
	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases	cases
(Budget Frequency) 1/	91	10	14	15	50	97	9	12	23	49	91	10	14	15	50	97	9	12	23	49
Gross cash farm income	4342	4762	4941	8058	14658	4455	6014	5877	6333	12196										
Cash operating expenses	3365	3576	2883	5173	7603	2704	3757	2866	2734	5730										
Net cash farm income	977	1186	2058	2885	7055	1751	2257	3011	3599	6466										
Value of home production food and fuel house rent	244	326	294	361	370	242	322	328	318	366										
Off farm income	212	167	147	249	256	224	167	201	218	234										
Net family income	168	75	180	201	247	230	51	62	178	319										
Family expenditures food clothing and personal household medical care other	226	249	338	298	318	248	289	300	360	360										
Family expenditures adj.	162	148	230	217	245	171	156	210	284	267										
Capital expenditures sale of capital goods livestock land, building and improv. machinery, equip., other	234	267	276	381	385	272	319	273	258	438										
	70	49	84	105	123	85	82	120	80	95										
	311	233	455	446	328	401	694	463	548	699										
	1459	1439	1824	2057	2025	1643	2029	1895	2066	2459										
	737	461	564	1229	1471	868	717	842	820	1060										
	-141	-94	-282	-216	-237	-217	-325	-75	-232	-297										
	255	170	222	419	465	218	245	299	265	414										
	174	82	191	171	366	263	289	125	271	336										
	449	303	433	855	877	604	508	423	516	607										

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 34--Cont'd.--1942

Budget Items	1940 Income Class \$3,000-\$3,999						
	Average : Income Change between 1940 & '42						
	all	-\$500-	:\$500-	:\$1,500-	:\$2,500		
	cases	:\$499	:\$1,499	:\$2,499	:\$2,500		
(Budget Frequency)	77	14	10	12	37		
Gross cash farm income	6572	7796	9547	10823	15781		
Cash operating expenses	3833	4958	5681	6274	7992		
Net cash farm income	2739	2838	3866	4549	7789		
Value of home production							
food and fuel	278	413	348	404	377		
house rent	257	202	262	255	278		
Off farm income	228	218	248	188	363		
Net family income	3502	3671	4724	5396	8807		
Family expenditures							
food	262	317	360	288	344		
clothing and personal	205	267	258	259	387		
household	369	333	301	324	440		
medical care	82	90	114	81	146		
other	508	434	426	670	720		
Family expenditures adjusted	1961	2056	2069	2281	2692		
Capital expenditures	984	1144	620	1032	1625		
sale of capital goods	-207	-249	-245	-234	-235		
livestock	247	466	344	379	349		
land, building & improvement	335	235	126	367	553		
machinery, equip., other	609	692	395	520	958		

1/ Classes with a budget frequency of less than 6 are not shown.

Table 35.- Expenditures made out of additions to income between 1940 and 1942, classified by size of income addition and by 1940 income position, FSA data

Budget Items	: '40 Income Class \$1000-\$1999 : '40 Income Class \$2000-\$2,999 : '40 Income Class \$3000-\$3,999									
	Income Change Class		Income Change Class		Income Change Class		Income Change Class		Income Change Class	
	-\$500- : \$1,500-	\$1,500- : \$2,500-	-\$500- : \$1,500-	\$1,500- : \$2,500-	-\$500- : \$1,500-	\$1,500- : \$2,500-	-\$500- : \$1,500-	\$1,500- : \$2,500-	-\$500- : \$1,500-	\$1,500- : \$2,500-
	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over	\$499 : \$1,499 : & over
(Budget Frequency) 1/	27 : 120	81 : 59	33 : 88	69 : 49	8 : 26	19 : 14				
Additions to:										
Net family income	250	1023	1868	3298	101	1046	1932	3366	212	999
Family expenditures										
food	76	71	99	87	71	81	75	93	61	91
clothing and personal	42	57	88	95	64	72	81	103	33	72
household	48	73	79	79	67	78	107	79	91	82
medical care	12	27	37	29	47	20	74	33	83	96
other	27	50	89	117	52	71	84	94	88	108
Family expenditures adj.	306	416	568	562	431	472	562	602	503	604
Capital expenditures										
sale of capital goods	2/ 91	2/257	2/471	2/814	2/169	2/302	2/493	2/772	2/518	2/608
livestock	"-202	" 20	" 27	" 36	"-15	"-41	"-12	" 15	" 38	"-12
land, building & improv.	"-126	" 73	" 158	" 216	" 207	" 92	" 85	" 264	" 276	"-14
machinery, equip., other	"-14	" 88	" 111	" 161	" 36	" 39	" 128	" 165	" 97	"-23
	" 39	" 125	" 241	" 469	"-70	" 144	" 270	" 342	" 183	" 601
Debt repayment	-104	168	480	891	67	234	525	1377	-280	-40
Total outlay	293	841	1519	2267	667	1008	1580	2751	321	1082
Liquid asset position	-43	182	349	1031	-566	38	352	615	-109	-83

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 37.- Expenditures made out of additions to income between 1940 and 1942, classified by base income position and size of income addition, FSA data

Budget Items	Income Change Class \$500-\$1,499			Income Change Class \$1,500-\$2,499		
	1940 Income Position			1940 Income Position		
	0-	\$1,000-	\$2,000-	0-	\$1,000-	\$2,000-
	\$999	\$1,999	\$2,999	\$999	\$1,999	\$2,999
(Budget Frequency) 1/	7	120	88	7	81	69
						19
Additions to						
Net family income	1040	1023	1046	999	2060	1932
						2055
Family expenditures						
food	72	71	81	91	82	75
clothing and personal	65	57	72	72	93	81
household	36	73	78	82	83	107
medical care	46	27	20	96	60	74
other	27	50	71	108	57	84
Family expenditures adj.	376	416	472	604	473	562
						595
Capital expenditures	2/-27	2/257	2/302	2/518	550	2/493
sale of capital goods	0	20	-41	38	63	12
livestock	-103	73	92	276	203	85
land, building & improv.	75	88	39	97	221	128
machinery, equip., other	-13	125	144	183	189	270
Debt repayment	245	168	234	-40	280	525
						797
Total outlay	594	841	1008	1082	1303	1580
						2000
Liquid asset position	446	182	38	-83	757	352
						55

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 38--Cont'd.--

Budget Items	Income Change Class \$2,500 and over									
	1940 Income Position									
	: 0- :		: \$1,000- :		: \$2,000- :		: \$3,000- :		: \$4,000- :	
	: Negative :		: \$999 :		: \$1,999 :		: \$2,999 :		: \$3,999 :	
(Budget Frequency)	1/	12	10	50	49	37	18	11		
Additions to										
Net family income		7763	6264	6307	4909	5339	5749	7482		
Family expenditures										
food		112	90	78	92	75	121	136		
clothing and personal		116	113	63	74	170	102	154		
household		108	178	130	127	-14	103	101		
medical care		20	36	36	33	61	7	34		
other		121	-65	9	293	177	107	746		
Family expenditures adj.		604	498	439	689	552	583	1306		
Capital expenditures										
sale of capital goods		377	786	605	21	606	918	101		
livestock		-116	-98	107	32	22	-174	-29		
land, building & improvement		178	389	184	143	84	343	44		
machinery, equip., other		109	184	114	6	171	74	33		
		-26	115	414	-96	373	327	-5		

1/ Classes with a budget frequency of less than 6 are not shown.

Table 39.- Income-outlay patterns expressed as a percentage of net family income, classified by base income position and size of income addition, FSA data

Budget Items	: Income Change Class \$500-\$1,499			: Income Change Class \$1,500-\$2,499		
	1940 Income Position			1940 Income Position		
	: 0- : \$1,000- : \$2,000- : \$3,000- :	: 0- : \$1,000- : \$2,000- : \$3,000- :		: 0- : \$1,000- : \$2,000- : \$3,000- :		
	: \$999 : \$1,999 : \$2,999 : \$3,999 :	: \$999 : \$1,999 : \$2,999 : \$3,999 :		: \$999 : \$1,999 : \$2,999 : \$3,999 :		
(Budget Frequency) 1/	: 7 : 120 : 88 : 26 :	: 7 : 81 : 69 : 19 :				
	P E R C E N T			P E R C E N T		
Net family income	: 100.0	100.0	100.0	: 100.0	100.0	100.0
Family expenditures						
food	: 9.2	9.4	8.2	: 7.3	7.5	7.2
clothing and personal	: 7.2	6.1	5.9	: 5.5	5.9	4.9
household	: 3.8	6.3	5.9	: 5.7	5.8	4.2
medical care	: 3.8	2.1	2.3	: 2.9	3.0	1.4
other	: 3.7	4.7	5.5	: 6.1	4.4	5.6
Family expenditures adjusted:	: 57.8	54.5	49.1	: 44.7	47.8	38.8
Capital expenditures	: 2/18.0	2/19.5	2/22.1	: 2/26.2	23.3	2/22.7
sale of capital goods	: 0	-1.9	-0.6	: -2.1	-2.3	-1.0
livestock	: 5.6	7.5	7.3	: 10.2	9.8	6.3
land, building & improv.	: 4.3	4.5	4.9	: 6.3	8.2	3.9
machinery, equip., other	: 7.4	9.5	10.5	: 11.7	7.6	18.5
Debt repayment	: 33.1	27.4	29.0	: 29.6	32.5	34.1
Total outlay	: 108.9	101.4	100.2	: 100.5	103.6	99.5
Liquid asset position	: -8.9	-1.4	-0.2	: -0.5	-3.6	0.5

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 40.- Income-outlay patterns expressed as a percentage of net family income, classified by base income position and size of income addition, College data

Budget Items	Income Change Class \$500-\$1,499				Income Change Class \$1,500-\$2,499			
	1940 Income Position				1940 Income Position			
	\$1,000-	\$2,000-	\$3,000-	\$1,000-	\$2,000-	\$3,000-	\$1,000-	\$2,000-
	\$1,999	\$2,999	\$3,999	\$1,999	\$2,999	\$3,999	\$1,999	\$2,999
(Budget Frequency) 1/	14	12	10	15	23	12		
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures								
food	12.6	8.3	7.6	8.1	8.3	5.3		
clothing and personal	8.6	5.8	5.5	5.9	6.6	4.8		
household	10.3	7.6	6.3	10.3	6.0	6.0		
medical care	3.1	3.3	2.4	2.8	1.9	1.5		
other	17.0	12.9	9.0	12.1	12.7	12.4		
Family expenditures adjusted	68.1	52.6	43.7	55.7	47.9	42.2		
Capital expenditures								
sale of capital goods	21.1	23.4	13.0	33.2	19.0	19.1		
livestock	-10.5	-2.1	-5.1	-5.8	-5.4	-4.3		
land, building and improvement	8.3	8.3	7.2	11.3	6.1	7.0		
machinery, equipment, other	7.1	5.4	2.6	4.6	6.3	6.8		
	16.2	11.8	8.3	23.1	12.0	9.6		

1/ Classes with a budget frequency of less than 6 are not shown.

Continued---

Table 40--Cont'd.

Budget Items	Income Change Class \$2,500 and over									
	1940 Income Position									
	12	10	50	49	37	18	11			
(Budget Frequency) 1/	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
Family expenditures										
food	6.1	6.0	4.0	4.9	3.9	4.4	3.4			
clothing and personal	4.9	4.8	3.1	3.6	4.4	3.9	3.3			
household	7.2	6.9	4.8	5.9	5.0	4.8	3.4			
medical care	1.6	2.1	1.6	1.3	1.6	1.2	1.2			
other	7.8	6.1	4.1	9.5	8.2	7.0	11.1			
Family expenditures adjusted	37.8	34.3	25.5	33.3	30.6	28.5	28.6			
Capital expenditures										
sale of capital goods	27.5	24.6	18.6	14.3	18.5	21.1	11.4			
livestock	-1.2	-2.4	-3.0	-4.0	-2.7	-2.1	-1.8			
land, building and improvement	11.1	8.6	5.9	5.6	4.0	7.3	3.2			
machinery, equipment, other	3.4	5.5	4.6	4.5	6.3	4.5	4.4			
	14.2	12.9	11.1	8.2	10.9	11.4	5.6			

1/ Classes with a budget frequency of less than 6 are not shown.

Table 41.- Income-outlay patterns classified by income position for 1940, 1941 and 1942, FSA data

Budget Items	Income Position			Income Position			Income Position		
	\$2,000-\$3,000-	\$3,000-\$4,000-	\$4,000-\$5,000-	\$2,000-\$3,000-	\$3,000-\$4,000-	\$4,000-\$5,000-	\$2,000-\$3,000-	\$3,000-\$4,000-	\$4,000-\$5,000-
(Budget Frequency) 1/	30	30	30	30	30	30	30	30	30
Net family income	2507	3484	4471	2371	2555	3507	2480	3524	3656
Family expenditures									
food	233	274	307	197	237	274	218	262	300
clothing and personal	139	180	234	119	142	191	162	197	229
household	132	190	233	129	153	207	130	163	212
medical care	42	67	112	41	49	77	87	62	80
other	133	175	244	128	152	199	132	132	203
Family expenditures adj.	1280	1546	1884	1183	1363	1661	1334	1498	1801
Capital expenditures	491	2/1011	2/1163	2/449	2/650	2/832	2/537	736	864
sale of capital goods	-39	-10	-81	-98	-33	-10	-35	-115	-21
livestock	153	249	283	144	214	307	206	176	263
land, building & improv.	115	231	222	160	125	188	126	114	209
machinery, equip., other	262	561	756	260	359	342	168	561	413
Debt repayment	761	995	1331	862	793	951	749	1005	1279
Total outlay	2532	3552	4378	2494	2806	3444	2620	3239	3944
Liquid asset position	- 25	-68	93	-123	-251	63	-140	285	-288

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 42.- Average family budgets for selected 1942 income classes classified by their 1940 income position, FSA data

	1942 Income Class		1942 Income Class		1942 Income Class		1942 Income Class		1942 Income Class	
	\$2,000-\$2,999		\$3,000-\$3,999		\$4,000-\$4,999		\$5,000-\$5,999		\$6,000-\$6,999	
Budget Items	1940 Income Position : \$1,000-\$1,999		1940 Income Position : \$2,000-\$2,999		1940 Income Position : \$3,000-\$3,999		1940 Income Position : \$4,000-\$4,999		1940 Income Position : \$5,000-\$5,999	
	: 0- : \$1,000-\$1,999		: 1- : \$2,000-\$2,999		: 2- : \$3,000-\$3,999		: 3- : \$4,000-\$4,999		: 4- : \$5,000-\$5,999	
(Budget Frequency)	1/	8	110	41	87	83	17	48	63	21
Net family income	2443	2489	2645	3428	3527	3698	4457	4429	4502	4375
Family expenditures										
food	240	239	259	270	280	315	252	293	304	425
clothing and personal	175	155	193	189	205	241	199	220	217	280
household	129	152	179	177	206	239	204	242	248	223
medical care	91	49	69	79	78	108	63	126	121	80
other	112	118	147	176	198	203	207	232	270	215
Family expenditures adj.	1357	1385	1531	1598	1701	1825	1638	1844	1919	2048
Capital expenditures	573	3/501	3/471	3/692	3/829	788	3/1066	3/1042	1272	1265
sale of capital goods	0	-14	-88	-87	-14	-52	-46	-61	-95	-215
livestock	222	215	228	232	287	183	383	281	515	940
land, building & improv.	233	79	82	177	184	168	185	249	333	65
machinery, equip., other	118	229	233	370	370	489	548	579	519	475
Debt repayment	853	648	934	1050	1070	1067	1148	1274	1494	902
Total outlay	2783	2534	2936	3340	3600	3680	3852	4160	4685	4215
Liquid asset position	-340	-45	-291	88	-73	18	605	269	-183	160

1/ Classes with a budget frequency of less than 6 are not shown. 2/ A sub-class with fewer than 6 cases is included to maintain the continuity of the table. 3/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 43.- Expenditure patterns expressed as a percentage of net family income classified by change in size of household and by size of income change between 1940 & 1942
FSA data

Budget Items	Size of income change \$500-\$1,499 : Size of income change \$1,500-\$2,499									
	Change in size of household : -- 2 : - 1 : 0 : 1 : 2					Changes in size of household : - 2 : - 1 : 0 : 1 : 2				
(Budget Frequency) 1/	8	25	147	43	6	5	17	98	40	8
	P E R C E N T					P E R C E N T				
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures										
food	9.2	7.9	8.5	8.7	10.5	8.0	7.6	6.7	7.7	7.2
clothing and personal	5.4	5.8	5.9	5.6	6.9	5.0	5.4	5.2	5.1	4.9
household	4.6	6.3	6.1	5.2	8.5	4.9	5.4	5.3	4.7	4.1
medical care	3.0	2.1	2.2	2.4	4.2	1.7	3.5	1.7	2.4	2.2
other	4.2	5.7	5.4	4.9	3.4	3.3	6.2	5.5	4.2	4.0
Family expenditures adj.	48.7	49.9	50.2	49.7	63.8	40.2	45.7	42.1	42.8	40.6
Capital expenditures										
sale of capital goods	17.3	2/27.2	2/22.9	2/19.8	11.3	19.1	14.3	2/23.5	28.8	18.8
livestock	-15.0	" -1.0	" -0.9	" -1.9	0	-0.7	-4.0	" -1.4	-0.5	0
land, building & improv.	8.8	" 9.7	" 8.7	" 8.4	2.2	3.5	5.4	" 7.5	9.4	3.0
machinery, equip., other	15.7	" 8.6	" 4.3	" 4.3	2.6	6.0	2.8	" 4.4	6.0	6.8
	7.8	" 10.7	" 10.9	" 9.4	6.5	10.3	10.1	" 12.8	13.9	9.0
Debt repayment	43.5	27.0	28.0	27.4	24.6	27.3	27.8	31.8	28.0	30.0
Total outlay	109.5	104.1	101.1	96.9	99.7	86.8	87.8	97.4	99.6	89.4
Liquid asset position	-9.5	-4.1	-1.1	3.1	0.3	13.2	12.2	2.6	0.4	10.6

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Table 44.- Major categories of outlay in 1942 classified by size of household in 1940 and by change in size of household between 1940 and 1942--FSA data

Category of Outlay	3 persons in 1940			4 persons in 1940			5 persons in 1940		
	Change in Size of Household			Change in Size of Household			Change in Size of Household		
	1	2	3	4	5	6	7	8	9
(Budget Frequency) 1/	7	90	36	16	115	29	20	71	17
Net family income	3559	3851	3477	3695	3759	3850	3673	3884	3478
Family expenditures adjusted	1553	1475	1475	1437	1614	1597	1791	1723	1621
Capital expenditures	276	1018	1015	920	840	903	891	889	800
Debt repayment	628	1271	1045	1001	1226	1143	1230	1235	1067
Total outlay	2457	3764	3565	3358	3680	3643	3912	3847	3488
	P E R C E N T A G E O F N E T F A M I L Y I N C O M E								
Net family income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Family expenditures adjusted	43.6	38.3	42.4	38.9	42.9	41.5	48.8	44.4	46.6
Capital expenditures	7.8	26.4	30.0	24.9	22.4	23.4	24.2	22.9	23.0
Debt repayment	17.6	33.0	30.1	27.1	32.6	29.7	33.5	31.8	30.7
Total outlay	69.0	97.7	102.5	90.9	97.9	94.6	106.5	99.1	100.3

1/ Classes with a budget frequency of less than 6 are not shown.

Table 45.- Additions to income between 1940 and 1942 with major categories of outlay classified by change in size of household, FSA data

Budget Items	Change in size of household between 1940 and 1942									
	1/	2	1	0	1	2	3	4	5	6
(Budget Frequency)	18	71	371	111	21					
Additions to										
Net family income	1620	1605	1655	1540	1937					
Family expenditures										
food	85	79	79	96	112					
clothing and personal	2	64	80	72	102					
household	78	78	84	63	101					
medical care	48	48	31	29	61					
other	44	81	84	66	40					
Family expenditures adjusted	386	484	511	480	669					
Capital expenditures	45	402	398	472	526					
Debt repayment	466	258	496	327	607					
Total outlay	897	1144	1405	1279	1802					

1/ Classes with a budget frequency of less than 6 are not shown.

APPENDIX

Measures of Central Tendency

The question obviously arises as to the reliability of the averages on which the generalizations in this analysis have been made. In general terms, the mean averages of Family Expenditures Adjusted for the static FSA data are good measures of central tendency, the mean averages of Debt Repayment are fair measures of central tendency, the mean averages of Capital Expenditures are poor measures of central tendency. For example, the mean average, the standard deviation, and the coefficient of variation for selected expenditures are as follows: (1) the income class \$1,000-\$1,999 which had the greatest frequency in 1940,

	<u>Family Expenditures Adjusted</u>	<u>Capital Expenditures</u>	<u>Debt Repayment</u>
M	\$1,023	\$272	\$558
σ	219	339	331
V	21.41%	124.63%	59.32%

and (2) the income class \$4,000-\$4,999 which had the smallest frequency in 1940

M	\$1,491	\$1,296	\$1,447
σ	315	691	976
V	21.13%	53.32%	67.45%

These measurements of the reliability of 1940 budget averages are also representative of the situations in 1941 and 1942. Regardless of the year or the income class within the year the V for Family Expenditures Adjusted approximates 20 percent, the V for Capital Expenditures ranges from 50 to 125 percent, the V for Debt Repayment ranges from 50 to 75 percent.

The reliability of expenditure averages for the College data in the static phase is improved in some respects and worsened in others compared with the FSA data. The high degree of central tendency found for Family Expenditures Adjusted in the FSA data is not to be found in the College data, whereas the degree of central tendency for Capital Expenditures is improved appreciably in the College data over the FSA data. For example, the mean average, the standard deviation, and the coefficient of variation for the highest frequency income class \$2,000-\$2,999 in 1940 are as follows:

	<u>Family Expenditures Adjusted</u>	<u>Capital Expenditures</u>
M	\$1,643	\$868
σ	510	716
V	31.04%	82.49%

The Standard Deviation and Coefficient of Variation as measures of the degree of scatter around selected average--averages basic to the dynamic analysis--are shown below. In Exhibit I measures of dispersion around average income-outlays for table 27 are presented; in Exhibit II measures of dispersion for table 31; in Exhibit III measures of dispersion for table 33; and in Exhibit IV measures of dispersion for table 34.

Exhibit I.- FSA Data

Budget Items	: 1942 Income Classes Distributed out of : the 1940 Income Class \$1,000-\$1,999				
	: \$1,000- : \$1,999	: \$2,000- : \$2,999	: \$3,000- : \$3,999	: \$4,000- : \$4,999	: \$5,000- : \$5,999
(Budget Frequency)	: 26	: 110	: 87	: 48	: 10
Family expenditures	: 1,292	1,385	1,598	1,638	1,701
Standard deviation	: 262	244	343	297	337
Coefficient of Variation	: 20.28%	17.62%	21.46%	18.13%	19.81%
Capital expenditures	: 299	501	692	1,066	1,349
Standard deviation	: 390	382	582	687	595
Coefficient of Variation	: 130.43%	76.25%	84.10%	64.45%	44.11%
Debt repayment	: 536	648	1,050	1,148	1,996
Standard deviation	: 393	267	610	658	1,208
Coefficient of Variation	: 73.32%	41.20%	58.10%	57.32%	60.52%

Exhibit II.- College Data

Budget Items	: 1942 Income Classes Distributed out of : the 1940 Income Class \$2,000-\$2,999					
	: \$2,000- : \$2,999	: \$3,000- : \$3,999	: \$4,000- : \$4,999	: \$5,000- : \$5,999	: \$6,000- : \$6,999	: \$8,000- : \$9,999
(Budget Frequency)	: 8	: 17	: 19	: 16	: 13	: 10
Family expenditures	: 1,662	1,823	2,310	2,174	2,629	2,941
Standard deviation	: 446	451	898	848	698	996
Coefficient of Variation	: 26.84%	24.74%	38.87%	39.01%	26.55%	33.87%
Capital expenditures	: 730	789	774	956	954	1,119
Standard deviation	: 609	400	405	507	752	524
Coefficient of Variation	: 83.42%	50.70%	52.33%	53.03%	78.82%	46.83%

Exhibit III.- FSA Data

Budget Items	: Change in Income between 1940 and 1942			
	: from the Base Position \$1,000-\$1,999			
	: -\$500-	: \$500-	: \$1,500-	: \$2,500
	: \$499	: \$1,499	: \$2,499	: and over
(Budget Frequency)	: 27	: 120	: 81	: 59
Family expenditures	: 1,353	1,395	1,590	1,664
Standard deviation	: 291	266	346	317
Coefficient of Variation	: 21.51%	19.07%	21.76%	19.05%
Capital expenditures	: 277	498	737	1,196
Standard deviation	: 254	398	602	723
Coefficient of Variation	: 91.70%	79.92%	81.68%	60.45%
Debt repayment	: 540	700	1,023	1,484
Standard deviation	: 376	402	567	1,046
Coefficient of Variation	: 69.63%	57.43%	55.42%	70.49%

Exhibit IV.- College Data

Budget Items	: Change in Income between 1940 and 1942			
	: from the Base Position \$2,000-\$2,999			
	: -\$500-	: \$500-	: \$1,500-	: \$2,500
	: \$499	: \$1,499	: \$2,499	: and over
(Budget Frequency)	: 9	: 12	: 23	: 49
Family expenditures adjusted	: 2,029	1,895	2,066	2,459
Standard deviation	: 1,231	511	749	1,035
Coefficient of Variation	: 60.67%	26.97%	36.25%	42.09%
Capital expenditures	: 717	842	820	1,060
Standard deviation	: 578	391	408	691
Coefficient of Variation	: 80.61%	46.44%	49.76%	65.19%

Outlays Related to Cash Income

Relating the major categories of outlay and their respective items of expenditure to net cash family income does not materially alter the descriptive picture set forth in the text, where net family income (including both cash and kind) is used as the primary control. In the cash income relationships under consideration the total value of home production is subtracted out of Net Family Income on the income side of the budget and out of Family Expenditures Adjusted on the expenditure side of the budget. Consequently the proportion of total disposable income allocated to each major category of outlay is changed. For the total amount of the income reduction cannot be removed from the one category, Family Expenditures Adjusted, and not affect the relative positions of the three major categories. Proportionally then, the amount of income allocated to Family Expenditures falls in the cash income relationships, and rises for Capital Expenditures and Debt Repayment.

Even though an absolute shift occurs in the expenditure level of the category, Family Expenditures, and the relative positions of each of the major categories of outlay is changed in the cash income analysis, as compared with the net family income analysis, the elasticities of expenditure of the major categories of outlay are not seriously affected. The basic similarity between the income-expenditure relationships of the cash analysis and the net family income analysis is illustrated by the closely paralleling income-expenditure curves, which emerge when the two sets of data are plotted on double logarithmic paper. This is not to say that minor changes in the elasticities of expenditure do not occur. But the discrepancies in the elasticities of expenditure, as between the cash income and the net family income analysis are not wide, and the discrepancies that do occur appear to be of a random nature. In other words, the rates of expenditure increase or decrease associated with comparable changes in income are not significantly different in this Appendix analysis from those observed in the text.

In sum, the generalizations drawn in the text regarding the changes in budgetary composition associated with changes in the causal factor income do not appear to be invalidated or in need of serious revision by the data presented in this Appendix. Changes in the income-expenditure relationships, when the principle control takes the form of net cash family income, rather than net family income appear to be inconsequential. (Basic budgetary data classified by net cash family income for the years 1940 and 1942 are included in exhibits I, II, III, and IV. Thus, interested researchers may experiment with the data on a cash basis if they wish to pursue these income-expenditure relationships further).

Exhibit I.- Farm family budgets classified by net cash family income, FSA data, 1940

Budget Items (Budget Frequency) 1/	Income Classes					Total
	0- \$999	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$10,000- and over:	
	140	332	137	21		642
Gross cash farm income	1518	2365	3433	4537		2536
Cash operating expenses	890	1028	1286	1580		1097
Net cash farm income	628	1337	2147	2957		1439
Off farm income	106	137	268	475		173
Net cash family income	734	1474	2415	3432		1612
Family expenditures						
food	151	189	231	239		192
clothing and personal	91	118	163	173		124
household	90	111	151	140		117
medical care	29	39	54	47		41
other	72	108	149	210		113
Family cash expenditures	433	565	747	809		587
Capital expenditures	2/261	2/363	2/649	2/1468	2/461	461
sale of capital goods	-20	-45	-83	-64	" -48	-48
livestock	141	156	218	414	" 189	189
land, building & improvement	31	75	142	520	" 100	100
machinery, equip., other	100	176	372	662	" 221	221
Debt repayment	464	700	985	1360		750
Total cash outlay	1158	1628	2381	3637		1798
Liquid asset position	-424	-154	34	-205		-186

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Exhibit II.- Farm family budgets classified by net cash family income, FSA data, 1942

Budget Items	Income Classes										\$10,000: Total & over:
	0- \$999	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$5,999	\$6,000- \$6,999	\$7,000- \$7,999	\$8,000- \$8,999	\$9,000- \$9,999	
(Budget Frequency) 1/	11	132	202	156	86	35	13				642
Gross cash farm income	2126	2849	4029	5340	6428	7761	10050				4794
Cash operating expenses	1368	1351	1667	2018	2258	2716	4087				1897
Net cash farm income	758	1498	2362	3322	4170	5045	5963				2897
Off farm income	132	102	154	152	270	311	565				179
Net cash family income	890	1600	2516	3474	4440	5356	6528				3076
Family expenditures											
food	174	240	266	287	306	324	312				275
clothing and personal	113	159	193	213	227	250	213				198
household	106	158	185	217	213	233	325				196
medical care	41	50	79	94	83	86	73				77
other	95	110	176	216	249	281	290				189
Family cash expenditures	529	717	899	1027	1078	1174	1213				935
Capital expenditures	2/125	2/436	2/688	2/985	2/1340	1219	2/2003				854
sale of capital goods	-80	-28	-52	-89	-49	-66	0				-55
livestock	95	184	242	364	424	503	747				312
land, building & improv.	11	79	158	193	284	281	716				183
machinery, equip., other	108	202	338	525	671	501	532				412
Debt repayment	645	710	918	1240	1690	2443	1916				1186
Total cash outlay	1299	1863	2505	3252	4108	4836	5132				2975
Liquid asset position	-409	-263	11	222	332	520	1396				101

1/ Classes with a budget frequency of less than 6 are not shown. 2/ Expenditure information for the individual capital items was not available in all cases where the total was given; hence, the total was computed from a larger group of observations than the individual capital items, and the sum of the items is not necessarily equal to the figure listed under the category, Capital Expenditures.

Exhibit IV.- Farm family budgets classified by net cash family income, College data, 1942

	Income Classes												
Budget Items	\$1,000-:\$2,000-:\$3,000-:\$4,000-:\$5,000-:\$6,000-:\$7,000-:\$8,000-:\$10,000-:	\$1,999:\$2,999:\$3,999:\$4,999:\$5,999:\$6,999:\$7,999:\$9,999:& over :	Total										
(Budget Frequency) 1/	25	38	59	54	52	25	25	43	38	38	367		
Gross cash farm income :	5071	7535	8103	8723	11011	13924	14375	16971	33937	12880			
Cash operating expenses :	3627	5155	4800	4493	5855	7940	7220	8566	18358	7165			
Net cash farm income :	1444	2380	3303	4230	5156	5984	7155	8405	15579	5715			
Off farm income :	116	195	168	259	299	425	382	370	432	279			
Net cash family income :	1560	2575	3471	4489	5455	6409	7537	8775	16011	5994			
Family expenditures													
food	290	343	316	329	334	378	423	393	407	351			
clothing & personal	184	229	219	273	279	311	414	365	447	293			
household	270	369	323	383	431	504	422	400	612	408			
medical care	75	112	89	80	140	140	141	144	146	116			
other	311	435	445	665	530	563	837	942	949	625			
Family cash expenditures :	1130	1488	1392	1730	1714	1896	2237	2244	2561	1793			
Capital expenditures	646	984	943	835	1240	1409	1825	1807	2622	1327			
sale of capital goods :	-171	-233	-202	-225	-242	-128	-268	-385	-269	-236			
livestock	222	359	401	319	350	472	638	531	1039	467			
land, build. & improv. :	156	210	197	194	327	385	437	653	693	348			
machinery, equip.,													
other	439	648	547	547	805	680	1018	1008	1159	748			

1/ Classes with a budget frequency of less than 6 are not shown.

